# A Case Study of Six High-Performing Schools in Tennessee

Jim Craig
Aaron Butler
Leslie Cairo, III
Chandra Wood
Christy Gilchrist
Joe Holloway
Sheneka Williams
Steve Moats

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Appalachia Educational Laboratory (AEL)
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**by**

**Appalachia Educational Laboratory (AEL) at Edvantia**

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For information about Edvantia research, products, or services, contact


P.O. Box 1348, Charleston, WV 25325; 304.347.0400 or 800.624.912
info@edvantia.org • www.edvantia.org



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## ABSTRACT

This study was undertaken to identify the common characteristics of high-performing schools in Tennessee, to determine if these features were consistent with what other studies of high-performing schools have reported, and to consider whether any of the identified components had any potential for being employed to improve student achievement in low-performing schools. Six schools (i.e., two elementary, two middle, and two high schools) were selected from a group of schools identified as high-performing based on a set of mathematics and English/language arts performance indicators. Interviews of teachers and administrators, based on Edvantia's Framework for Transforming Low-Performing Schools into High-Performing Learning Communities, were conducted in the six schools. In addition, a battery of surveys were administered to the schools' teachers and administrators. School documents (e.g., student handbooks, school newsletters) were collected during school visits and were reviewed. The researchers found that high-performing schools in Tennessee were characterized by dedicated, hard-working teachers who were implementing curricula described as being aligned with state standards and working within school cultures of high expectations for student and teacher performance. Furthermore, school leaders were described as making teaching and learning the schools' central focus. At these schools, teachers employed multiple assessment strategies and used data to make instructional decisions to implement differentiated teaching strategies in order to meet the learning needs of their students. For this particular set of high-performing schools in Tennessee, all of these things occurred in an environment of strong parent interest and community support. Based on the findings, the researchers suggest there are five things that teachers and administrators in low-performing schools might consider to improve student achievement:

1. Emphasize high expectations for student behavior and learning—if students are expected to behave and achieve, most will rise to the challenge.

2. Emphasize high expectations for teachers—effective teaching is hard work that always seems to present new challenges.

3. Work hard—getting and sustaining high levels of student achievement takes dedicated effort; high student achievement is not a state achieved but a process maintained.

4. Focus on effective teaching—focus on mentoring, collaboration, meaningful professional development, and the use of data to make instructional decisions as the means by which teachers learn to develop and implement instruction adapted to the learning needs of students.

5. Involve the parents—engage parents in the education of their children.

# INTRODUCTION

A number of researchers and organizations (e.g., Education Trust, 2001; Ellis, Gaudet, Hoover, Rizoli, & Mader, 2004; Intercultural Development Research Association, 1997; Just for the Kids, 2001; Kannapel & Clements, 2005; Reeves, 2000) have examined selected high-performing schools in different parts of the country and have documented the characteristics these schools seem to have in common. Of interest, of course, is the identification of those factors present in high-performing schools that can be transported to and implemented in low-performing schools to improve student achievement, especially in those schools that have high percentages of minority students and students of low socioeconomic status (SES). This study was undertaken to identify the key features of a sample of high-performing schools in Tennessee, to examine how these features compare to what other researchers have found, and to ascertain if these features hold any potential for implementation in low-performing schools to improve student achievement.

## Review Of The Relevant Research Literature

The predominant finding in a review of the relevant research literature reveals no single thing schools can do to become more successful in producing higher levels of student achievement, other than perhaps to engage in years of hard work focused on that improvement (Kannapel & Clements, 2005; Reeves, 2000; Washington State Department of Education, 2005). Having said that, what follows is a brief review of findings reported by researchers who have studied high-performing schools that have high percentages of minority and low-SES students.

### High Expectations

Researchers have found that high-performing schools typically embrace a culture of high expectations. These high expectations for students generally motivate students to perform at higher levels and support increased student achievement (Joint Legislative Audit and Review Commission, 2004; Picucci, Brownson, Kahlert, & Sobel, 2002). It is also common that this culture of high expectations is directed at faculty and staff (e.g., Kannapel & Clements, 2005) and includes regular students as well as those students with special needs (e.g., University of Massachusetts Donahue Institute, 2004).

### Curriculum

**Alignment of curriculum with standards.** Studies of high-performing schools indicate that these schools focus on the curriculum and work to ensure that their curriculum, instruction, and assessment are aligned with applicable standards. For example, studying high-performing urban schools in Massachusetts, the Donahue Institute (2004) observed, “Among the most immediate findings in the field research

process was a tremendous emphasis at both the district and school levels on curriculum alignment with the Massachusetts Curriculum Frameworks." Findings from the Education Trust (1999) were similar: Top-performing schools "report extensive use of standards to design curriculum and instruction, assess student work, and evaluate teachers." Reeves (2000) also emphasizes the importance of making deliberate curriculum choices. Findings from other studies (Joint Legislative Audit and Review Commission, 2004; U.S. Department of Education, 1999) reinforce the importance of aligning curriculum, instruction, and assessment with applicable standards.

**Maximize instructional time.** Studies of schools in several states have found that faculty in high-performing schools maximize the amount of time spent on instruction by structuring the school day efficiently and creating additional time for instruction (Joint Legislative Audit and Review Commission, 2004; McGee, 2004; Picucci, et al., 2002; U.S. Department of Education, 1999). This was accomplished variously by structuring the school day to minimize interruptions and transition time and by providing additional instruction time after school or during the summer. Kannapel and Clements (2005) and Reeves (2000) observed that an academic, instructional focus was a common feature of the high-performing schools they studied.

**Purposeful assessment.** In addition to a focus on alignment of curriculum with standards, a common practice observed by researchers in high-performing schools is purposeful student assessment. Such assessment provides meaningful information regarding what students are learning relative to the curriculum being implemented. This includes regular assessment of students (Kannapel & Clements, 2005; Reeves, 2000) as well as using assessment data to inform instructional decisions (Education Trust, 1999; Hair, Kraft, & Allen, 2001; Joint Legislative Audit and Review Commission, 2004; McGee, 2004); University of Massachusetts Donahue Institute, 2004).

## Collaboration and Hard Work

The presence of talented, hard-working, effective teachers was identified by several researchers as a component of high-performing schools (Hair, Kraft, & Allen, 2001; Joint Legislative Audit and Review Commission, 2004; Kannapel & Clements, 2005; McGee, 2004). Collaboration or teamwork has been reported as a key feature that hard-working teachers exhibit and is another characteristic commonly observed by researchers in high-performing schools. For instance, in a study of high-performing middle schools in Georgia, Trimble (2002) observed interdisciplinary teams, administrative teams, grade-level teams, school improvement teams, content-area teams, student support teams, and special focus teams. Picucci, Brownson, Kahlert, and Sobel (2002) also found that a collaborative attitude tends to characterize the relationships of staff within high-performing schools as well as relationships between the school and outside entities such as the district office and the larger community. Kannapel and Clements (2005) and Picucci, Brownson, Kahlert, and Sobel (2002) also emphasize the role of collaborative or democratic decision-making processes. Other researchers and organizations (Hair, Kraft, & Allen, 2001; Joint Legislative Audit and Review Commission, 2004; McGee, 2004; U.S. Department of Education, 1999) have published

similar findings regarding the importance of staff collaboration, communication, and teamwork in high-performing schools.

## Effective Leadership

Effective leadership is another important characteristic of high-performing schools (University of Massachusetts Donahue Institute, 2004). A common theme in existing research is that school leaders in successful schools tend to focus on instructional issues (Joint Legislative Audit and Review Commission, 2004; U.S. Department of Education, 1999). McGee (2004) characterized principals in Illinois high-performing schools as "leaders of learning," saying, "The principal's direct involvement in the teaching and learning process is critical."

## Parent Involvement

High-performing schools are frequently found by researchers to have high levels of parent involvement (Education Trust, 1999; Kannapel & Clements, 2005; U.S Department of Education, 1999). While the nature of the involvement varies from school to school, the Donahue Institute (2004), the Education Trust (1999), McGee (2004), and the U.S. Department of Education (1999) found that high-performing schools tend to work to actively involve students' parents in the teaching and learning process.

## Other Factors

Other characteristics and practices identified by researchers as being associated with high-performing schools include: (1) purposeful teacher hiring practices (Joint Legislative Audit and Review Commission, 2004; Kannapel & Clements, 2005; University of Massachusetts Donahue Institute 2004); (2) effective use of resources (Trimble, 2002; University of Massachusetts Donahue Institute, 2004; U.S. Department of Education, 1999); and (3) differentiation or flexibility in instruction (Hair, Kraft, & Allen, 2001; Joint Legislative Audit and Review Commission, 2004; Picucci, Brownson, Kahlert, & Sobel, 2002).

## Summary

Table 1 illustrates the consistency of research findings regarding characteristics of high-performing schools that have high percentages of minority and low-SES students. The extent to which particular concepts and terms used by different researchers overlap with one another may be debated. Likewise, most of the studies identify additional characteristics that are not listed in the table. The intention is to illustrate areas in which different researchers have identified similar characteristics or practices in the group of high-performing schools each studied and not to present an exhaustive listing of findings.

Table 1. *Common Findings in Recent Studies of High-Performing Schools with High Percentages of Minority and Low-SES Students*

| Study | Schools | Characteristics Identified | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | *Collaboration/ Teamwork* | *Assessment/ Using data* | *Teachers: hard work, efficacy* | *Instructional leadership* | *Curriculum: alignment, choices* | *Maximizing instructional time* | *Culture/ Expectations* |
| Kannapel & Clements (2005) | High-performing, high-poverty elementary schools in Kentucky (*n*=8) | ✓ | ✓ | ✓ | | | | ✓ |
| JLARC (2004) | High-performing schools in Virginia (*n*=61) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| University of Massachusetts Donahue Institute (2004) | High-performing urban schools in Massachusetts (*n*=10) | | ✓ | | ✓ | ✓ | | ✓ |
| McGee (2004) | High-performing, high-poverty schools in Illinois (*n*=59) | | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Trimble (2002) | High-performing, high-poverty middle schools in Georgia (*n*=5) | ✓ | | | | | | |
| Picucci et al. (2002) | High-performing, high-poverty middle schools (*n*=7) | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| Hair, Kraft, & Allen (2001) | High-performing, high-poverty schools in Louisiana (*n*=12) | ✓ | ✓ | ✓ | | | | |
| Reeves (2000) | High-performing, high-poverty schools (*n*=228) | | ✓ | | | ✓ | | |
| Education Trust (1999) | High-performing, high-poverty schools (*n*=366) | | ✓ | | | ✓ | | |
| U.S. Department of Education (1999) | High-performing, high-poverty urban elementary schools (*n*=9) | ✓ | | | ✓ | ✓ | ✓ | |

✓ = characteristic identified  *n* = number of schools

## METHODS

### Participating Schools

Edvantia identified a set of elementary, middle, and high schools based on performance across a set of achievement indicators. For elementary and middle schools, the achievement indicators used were 2003-2004 reading NCE, math NCE, language arts NCE, and writing proficiency scores. For high schools, the achievement indicators used were 2003-2004 English ACT, math ACT, reading ACT, and writing proficiency scores.

Middle and high schools were identified as high-performing if they scored in the 80$^{th}$ percentile or above on *all* four achievement indicators. Due to the large number of elementary schools, the set of identified schools was restricted to elementary schools scoring in the 95$^{th}$ percentile or above on *all* four achievement indicators.

The set of identified high-performing schools was presented to the Tennessee Department of Education, which then selected six schools from six different school systems to participate in this study: two elementary schools, two middle schools, and two high schools. The six schools differed substantially from low-performing Tennessee schools (i.e., Corrective Action schools) in terms of the percentages of minority students enrolled and the percentages of students designated as economically disadvantaged. These differences are summarized in Table 2.

Table 2. *The Percentages of Minority and Economically Disadvantaged Students Enrolled in the High-Performing Schools Studied as Compared to Low-Performing Schools in Tennessee.*

| Type of School (2003-2004) | % Minority Enrolled Mean (*SD*) | % Economically Disadvantaged Mean (*SD*) |
|---|---|---|
| High-Performing | 10.63% (11.70%) | 21.37% (19.27%) |
| Low-Performing Schools in Tennessee | 91.98% (20.64%) | 93.37% (6.42%) |

### Data Collection Techniques

#### Interviews

Edvantia researchers developed an interview protocol using Edvantia's Framework for Transforming Low-Performing Schools into High-Performing Learning Communities as a guide. The framework, described in Table 3, consists of seven components that have been identified as key features of continuously improving schools: (1) learning culture, (2) school/family/community connections, (3) effective teaching, (4) shared leadership, (5) shared goals for learning, (6) purposeful student assessment, and

(7) aligned and balanced curriculum. In addition, the interview protocol included general opening and closing questions and a question regarding concerns about continued improvement.

Table 3. *Descriptions of Edvantia's Components of Continuously Improving Schools*

| Component | Description |
|---|---|
| **Learning Culture** | The extent to which the culture of the school encourages learning by students, staff, and administrators; to which the school is a safe but exciting place to be where curiosity and exploration are encouraged; and to which teachers have opportunities and encouragement to reflect on practice, work with others, and try new ways of teaching. |
| **School/Family/Community Connections** | The extent to which parents and community members are involved and feel part of the school through informing parents and community, forming meaningful partnerships, maintaining open communication, and honoring and respecting diverse points of view. |
| **Effective Teaching** | The extent to which teacher practice is aligned with research on effective teaching, including whether teachers actively engage students in a variety of learning tasks, pose questions that encourage reflection and higher order thinking, expect students to think critically, and use strategies designed to motivate students. |
| **Shared Leadership** | The extent to which leadership is shared with open, bi-directional communication and there are mechanisms in place for involving teachers, students, and parents in leadership development. |
| **Shared Goals for Learning** | The extent to which the school has clear, focused goals that are understood by all members of the school community and to which shared goals affect what is taught and how teachers teach, drive decisions about resources, focus on results for students, and are developed and "owned" by many rather than a few. |
| **Purposeful Student Assessment** | The extent to which student assessment data are meaningful and used by teachers to guide instructional decisions and communicate with teachers, parents, students, and other members of the community. |

| Component | Description |
|---|---|
| **Aligned and Balanced Curriculum** | The extent to which the school's curriculum is aligned and balanced; the principal is involved in monitoring the curriculum alignment process, the lesson plans of teachers, and use of student achievement data in curriculum emphasis; and subjects/courses are balanced across grades. |

To keep the length of the interviews at a workable level, the Edvantia researchers developed a matrix sampling system to conduct the interviews (see Appendix A for the sampling matrix). Under the system developed, each individual teacher was asked two or three questions related to two of the seven research constructs listed above. In addition, the general opening and closing questions and the question regarding concerns about continued improvement were common to all interviews. Therefore, each interviewee was asked seven to eight questions during an interview. The interviews were planned so that, insofar as possible, questions related to each of the seven research constructs explored were asked an equal number of times at each school. In addition, interviewers attempted to distribute the questions related to each research construct across grade levels and content areas. Principals at the six schools participated in a longer interview that addressed all seven of the research topics and the common questions.

Each interview was tape recorded with permission of the interviewee and transcribed for data processing and analysis. Most interviews were approximately 30 minutes in length.

**Surveys**

Five survey instruments developed by Edvantia were used to collect data about the six participating schools. These instruments were the Continuous School Improvement Questionnaire (CSIQ)[1] (AEL, 2002), the Measure of School Capacity for Improvement (Edvantia, 2005a), and the Perceptions of School Culture (Edvantia, 2005b). In addition, a Parent Survey and a Community Member Survey were developed for this study. The CSIQ, the MSCI, and the POSC measure various aspects of school culture and were designed to be completed by school professional staff. The Parent Survey was designed to be completed by parents of school students. This instrument asked respondents questions related to the frequency of their interactions or contacts with the school, the quality of their interactions or contacts with the school, and their perceptions of the school. The Community Member Survey was designed to assess the frequency and quality of interactions between the school and members of the community in which the school is situated and was intended to be completed by community members other than students' parents.

[1] This instrument was identified as the AEL Continuous School Improvement Questionnaire at the time it was administered.

**Continuous School Improvement Questionnaire (CSIQ)**. The 60-item CSIQ is designed to measure a school's performance on six dimensions related to continuous school improvement. The CSIQ is intended to be completed by school professional staff. Professional staff are asked to rate the extent to which each item is present in their school, using a 6-point Likert-type scale ranging from "1" indicating *Not Present* to "6" indicating *Present to a High Degree*. Participants are also asked to respond to additional demographic items. The survey is formatted for machine scoring.

The CSIQ consists of six subscales.

1. **Learning Culture.** This subscale reflects whether the culture of the school promotes learning by all—students, staff, and administration. It reflects the extent to which the school emphasizes learning rather than passive compliance, is a safe but exciting place to be, and encourages curiosity and exploration. In addition, it indicates the extent to which teachers have opportunities and encouragement to reflect on practice, work with others, and try new ways of teaching.
2. **School/Family/Community Connections.** This subscale assesses the extent to which parents and community members are involved in and feel part of the school. It reflects the degrees to which they are kept informed, meaningful partnerships exist, communication is open, and diverse points of view are honored and respected.
3. **Effective Teaching.** This subscale ascertains the extent to which teacher practice is aligned with research on effective teaching. It assesses whether teachers actively engage students in a variety of learning tasks, pose questions that encourage reflection and higher order thinking, expect students to think critically, and use teaching strategies designed to motivate students.
4. **Shared Leadership.** This subscale reflects the extent to which leadership is viewed as being shared. It assesses whether school administrators dominate decision making or if there are mechanisms for involving teachers, students, and parents. Opportunities for leadership development among the members of the school community are assessed, as are the degree to which information is shared and the extent to which school administrators listen and solicit the input of others.
5. **Shared Goals for Learning.** This subscale assesses the extent to which the school has clear, focused goals that are understood by all members of the school community. In addition, it reflects whether shared goals affect what is taught and how teachers teach, drive decisions about resources, focus on results for students, and are developed and "owned" by many rather than a few.
6. **Purposeful Student Assessment.** This subscale reflects the extent to which student assessment data are meaningful; are used by teachers to guide instructional decisions; and are communicated to and understood by the greater school community, including teachers, parents, students, and other members of the community.

**Measure of School Capacity for Improvement (MSCI).** The 64-item[2] MSCI is designed to assess the degree to which schools possess the potential to become high-performing learning communities. It is intended to be completed by school professional . For 31 items, professional staff are asked to rate the extent to which each item is true for their school, using a 6-point Likert-type scale ranging from 1 indicating *Not at all true* to 6 indicating *Completely true*. For the remaining items, professional staff are asked to rate how often each item is true for their school using a similar 6-point Likert-type scale ranging from "1" indicating *Never true* to "6" indicating *Always true*. Participants are also asked to respond to additional demographic items. The survey is formatted for machine scoring.

MSCI consists of seven subscales.

1. **Equity in Practice.** This subscale assesses equitable practices in the school, specifically addressing responsive pedagogy and antidiscriminatory practices including the creation of an atmosphere of tolerance, cultural awareness, and equity.
2. **Expectations for Student Performance.** This subscale assesses staff members' expectations of the students and their beliefs that all students can perform well academically.
3. **Differentiated Instruction.** This subscale addresses using or modifying instructional practices to reach students of diverse learning needs.
4. **Improvement Program Coherence.** This subscale pertains to improvement initiatives that a school might undertake and focuses on the coordination of improvement programs or initiatives with existing initiatives and with school improvement goals and focuses on school-level support of and for improvement initiatives.
5. **Peer-Reviewed Practice.** This subscale assesses the extent to which professional staff in a school observe the work of their colleagues and give or receive relevant feedback about their performance.
6. **Coordinated Curriculum.** This subscale addresses the coordination of curriculum within and across grade levels at the school.
7. **Technical Resources.** This subscale assesses instructional resources and materials, including whether staff possessed or had immediate access to adequate materials and resources to achieve instructional objectives.

**Perceptions of School Culture (POSC).** The 170-item[3] POSC is designed to assess staff perceptions related to various aspects of school culture. The POSC is intended to be completed by professional school staff. For the first 126 items, professional staff are asked to rate the extent to which each item occurs at their school, using a 5-point Likert-type scale ranging from "1" indicating *Not at All* to "5" indicating *Very Much*. For the remaining items, professional staff are asked to rate the extent to which each item is true for the professional staff at their school using a similar 6-point Likert-type scale ranging from "1" indicating *Not at All True* to "6" indicating

[2] Participants in this study completed a field-test version of the MSCI with 64 items.
[3] Participants in this study completed a field-test version of the POSC.

*Completely True*. Participants are also asked to respond to additional demographic items. The survey is formatted for machine scoring.

The POSC comprises six subscales.

1. **Collaborative Working Relationships.** This subscale reflects the extent to which faculty work together, trust and respect each other, have open channels of communication, and share leadership and responsibility for problem solving and decision making.
2. **Student-Centered Vision, Mission, and Policies.** This subscale indicates the degree to which the school's vision, mission, goals, and policies are clear and consistent with each other; incorporate high expectations for all students; and are communicated to staff, students, and parents. It also indicates the school's use of measurable goals and data-based decision making.
3. **Student Responsibility for Learning.** This subscale measures faculty perceptions of their students' intrinsic motivation, persistence, awareness of their own learning strengths, and control over their own learning. It also indicates faculty perceptions of the strength of parents' belief in the importance of student effort and parent support.
4. **Teacher Responsibility for Learning.** This subscale reflects the degree to which faculty strive to improve teaching and learning, at both the individual and the collective levels, and share responsibility for high levels of student learning. It also indicates the extent to which teachers accommodate students' different learning styles and encourage student collaboration and self-motivation.
5. **Inviting Physical Environment.** This subscale indicates the extent to which the school's physical environment is perceived as clean, safe, and welcoming.
6. **Students and Parents as Decision Makers.** This subscale assesses the degree of student and parent participation in planning and decision making that impact the school program. It also reflects the school's efforts to promote students' engagement with their own learning.

**Parent Survey.** The 16-item parent survey was designed to assess the frequency and quality of interactions between the school and students' parents. It is intended to be completed by students' parents. Parents are asked to rate how often each item occurs, using a 4-point Likert-type scale ranging from "1" indicating *Never* to "4" indicating *Always*. The survey provides information regarding (1) communication between parents and teachers, (2) celebration of student successes, (3) requests for parent input, (4) communication between parents and the school, and (5) parent involvement in the school. A copy of the Parent Survey is included in Appendix C.

**Community Member Survey.** The 6-item community member survey was designed to assess the frequency and quality of interactions between the school and members of the community in which the school is situated. It was intended to be completed by community members other than students' parents. Community members were asked to rate how often each item occurs, using a 4-point Likert-type scale ranging

from “1” indicating *Never* to “4” indicating *Always*. A copy of the Community Member Survey is included in Appendix D.

### Document Reviews

At each participating school, Edvantia researchers collected documents that might detail school policies and procedures and provide insights regarding school operations. These documents included student handbooks, teacher handbooks, parent handbooks, instructional schedules, school policies and procedures documents, school planning documents, school newsletters, and the like.

## Procedures

### Interviews

Teams of Edvantia researchers visited the six participating schools to conduct structured, on-site interviews with school faculty. Researchers from Edvantia contacted the principals of the participating schools and asked for their assistance in scheduling interviews with a sample of their faculty. In all, 205 faculty interviews were scheduled. Due to schedule changes and some teachers’ inability to participate in their scheduled interviews, 195 interviews were conducted across the six sites. The majority of interview participants were core content (i.e., language arts, mathematics, science, and social studies) teachers. The remaining interview participants were related arts teachers (i.e., non-core content area teachers) and administrators. The principals of all six schools participated in interviews

For inclusion in this study, each participant signed an Informed Consent form, which stated their rights as a research subject and listed contact information for researchers and the Internal Review Board (IRB) at Edvantia. Participants were instructed to contact researchers for answers to questions regarding this study or if they decided to discontinue participation in it. Participants were also instructed to contact the IRB if they had questions about their rights as research subjects. Participation in this study was completely voluntary.

### Surveys

Researchers relied on the principals of the participating schools to coordinate the administration of the survey instruments. Researchers sent the POSC to the principal of each participating school after discussing the study with them and before their site visit. The instruments were accompanied by guidelines for administration. The principals coordinated the administration of the POSC and sent forms back to Edvantia. Approximately six weeks later, the MSCI and CSIQ were sent to the principals of participating schools for completion and return, using procedures identical to those used for the POSC. Researchers handed copies of the Parent Survey and the Community Member Survey to the principal of each participating school during their site visit. Due to unanticipated circumstances beyond the control of the Edvantia researchers, the MSCI, the CSIQ, the Parent Survey, and the Community Member Survey were not administered at one participating school.

### Document Reviews

During the site visits to the schools, Edvantia researchers asked principals to provide copies of available documents that might detail school policies, provide insights on school operations, or elaborate on topics brought up during interviews. Edvantia researchers inventoried the documents made available and collected during the school site visits.

## Data Analyses

### Interviews

Transcripts were made of each recorded interview. Using Atlas qualitative software, researchers analyzed the transcripts by grouping the responses into themes and coding each of the transcripts.

### Surveys

Upon receipt of completed instruments by Edvantia, researchers scored the instruments and analyzed the data using the standard norms and protocols associated with each. The results of the normed instruments (i.e., the POSC, the MSCI, and the CSIQ) were provided to the principals of the participating schools. Responses to the Parent Survey and the Community Member Survey were summarized and descriptive statistics for each item on the two surveys were tabulated. Due to unanticipated changes in the leadership at one of the participating schools, not all of the survey data for that school were collected.

**Document Reviews**

The various documents collected during the visits were reviewed by Edvantia researchers and used as sources of additional information in the analyses of interview and survey data.

# RESULTS

## Interviews

### Perceived Reasons for Success

Teachers and administrators from the high-performing schools in this study were asked to state in their own words why their schools had achieved high levels of student performance. Interviewees varied in the number of reasons they listed as contributing to the schools' success. In general, responses fell into three broad categories: (1) learning culture, (2) school/family/community connections, and (3) effective teaching. The categories are presented in order from the most-often to least-often mentioned by respondents.

**Learning culture.** The high-performing schools in this study seem to be characterized by positive learning cultures. In particular, respondents from all schools reported that high expectations are held for students' academic performance. In addition, respondents reported high expectations for student behavior, as evidenced by strong discipline programs, as a contributing factor in their schools' successes. These teachers' views on the importance of discipline can be summarized by one middle school teacher's response,

> There is a real good environment as far as safety and discipline with the students and it seems like they're all expected to behave in such a way that every other child around them can learn and they seem to do that and not have many discipline problems as far as behavior in classrooms, which is a huge thing these days.

High expectations pervade these schools, according to the interviewees. In addition to a culture of high expectations for students, there are high expectations for faculty members. Teachers are expected (and expect themselves) to work hard, put in extra time beyond the school day, be involved with students in extracurricular clubs and activities, be highly skilled, and be dedicated to their careers and their students. Teachers are very aware they work at high-performing schools—schools that the community expects to remain high-performing. An elementary school teacher commented, "If you teach here, if you teach at any of the schools [around] here . . . you are self-driven and you will go the extra mile. You will come in early and stay late. You will be here on the weekends, and throughout the summer." Additional comments made in response to specific questions regarding the learning cultures of the schools will be presented below.

**School/family/community connections.** One of the commonly mentioned set of reasons for success volunteered by the teachers interviewed in the sample of high-performing schools revolved around the connections among the schools, families, and communities. Specifically, the most commonly cited reason in this arena for the schools' ability to achieve and sustain high levels of student performance was the high value

students' families place on education. Teachers from all six schools noted the family and community valuing of education as a reason for the schools' success. The role that school/family/community connections play in high-performing schools will be discussed further below.

**Effective teaching.** The third reason for success reported by teachers related to effective teaching and included the presence in these schools of highly educated and experienced teachers. For instance, a high school teacher believed that part of the school's success lay in the school's "superior teachers, highly qualified teachers, teachers that care about their subject areas and ways of presenting material." The teachers interviewed frequently reported their schools' experienced faculties had at least a master's degree in their subject fields and worked to keep current in their field and in teaching in general. Said an elementary teacher, "We do have a dedicated faculty, many of whom are also very well educated, who have a master's or above qualifications." In addition to faculty members who hold doctorates, these schools employ teachers who are Fulbright scholars, who are winners of "Teacher of the Year" awards, and who are known nationally in their fields. More will be said about effective teaching in high-performing schools below.

## Learning Culture

The teachers and administrators in the high-performing schools were specifically asked about the learning culture of their schools. For the most part, respondents stated that their schools' operations reflected a positive learning culture, even though particular aspects of that culture may not have been formally codified. Collectively, the learning culture characteristics that seemed to be common to all six high-performing schools were: (1) high expectations for students, (2) high expectations for teachers, (3) hard-working, dedicated teachers, (4) teachers treated as professionals, (5) teacher collaboration, and (6) emotionally warm, supportive learning environments.

**High expectations for students.** As noted previously, the teachers and administrators at the six high-performing schools reported that their schools were characterized by high expectations for student achievement and behavior. In fact, high expectations for students' academic performance was the most common theme heard at all six of the high-performing schools. Furthermore, the interviewees indicated that these high expectations served to motivate students. A middle school teacher described it this way: "I think they have high standards. I think it is a rigorous curriculum. Expectations are high for the students. Students meet that challenge." A high school teacher remarked, "Our program of studies looks like college level." Participants generally reported that these high expectations apply to all students in the high-performing schools. One teacher said, "We have high standards for all students . . . I teach lower-level and upper-level classes. We have high expectations for all of our students."

Interview participants at several of the schools also pointed out that the high expectations that school staff have for students were commonly reinforced by similar

high expectations from parents. One teacher shared, "We have great parents . . . . The parents are very involved, and . . . they have high expectations as well." Another teacher said, "The parents are extremely involved . . . . They want the children to learn. They want them to do well, and they expect them to."

Teachers and administrators in the six schools indicated that high expectations for students also applied to students' behavior. In discussing her school's behavioral expectations for students, one elementary school teacher said, "Again, I think that overall we're fairly traditional as far as . . . having high expectations for behavior and not allowing disruptions." A middle school teacher described expectations for student behavior this way: "It seems like they're all expected to behave in such a way that every child around them can learn, and they seem to do that and not have many discipline problems as far as behavior in classrooms." Each school had a discipline policy or discipline code that set out many of the expectations for student behavior. Many teachers and administrators interviewed described their schools' discipline policies as "strong" and "effective."

**High expectations for teachers.** Based on the interviewees' responses, each school visited seemed to embrace a learning culture that emphasized high expectations for teachers and staff. Teachers and administrators frequently cited high expectations for staff as a contributing factor to the schools' performance. When speaking about curriculum, one elementary school teacher made this comment:

> "Expectations for teachers are high. You're expected to provide, not only a curriculum—just a standard curriculum—but you're expected to provide a curriculum for students that goes above and beyond just strictly out of the book; you need to be creative."

Another teacher described how teachers at his middle school perpetuated high expectations for themselves:

> "I also think that we have a group here who tends to put pressure on themselves. I think a lot of it comes from within. I think we are very fortunate to have a group of teachers who are so dedicated that we put pressure on ourselves as well. We actually—I'm naming all these other people who hold us accountable; we hold ourselves accountable."

In many cases, these expectations emanated not only from staff but from parents. An elementary school teacher made the fairly typical comment, "Our parents are—they support us, but they expect a lot out of us also. . . . They expect you to do a good job."

Several participants also reported that high expectations for teachers extend beyond the classroom. Teachers at more than one school indicated that they were expected to be as active as possible in sponsoring, facilitating, or otherwise supporting

extracurricular student activities. One high school teacher remarked, "From an academic point of view, the expectation is that your faculty will participate in the intellectual life of the nation, by going to conferences and presenting. At other schools [I'm familiar with], it's nice when you do those things. . . . Here, you are expected to do it."

Principals at several of the high-performing schools indicated that high expectations for staff also played a significant role in their hiring practices for teachers. They reported they were very aggressive in actively searching for qualified, dedicated teachers when vacancies occurred in their schools. They recruited highly qualified teachers for their schools and openly communicated the high expectations for students and teachers at their schools during the recruiting process.

**Hard-working, dedicated teachers.** Those interviewed consistently cited the hard work and dedication of teachers and staff as a major factor in their schools' success. Teachers reported that they were actively concerned with their students' academic performance, that they often worked extra hours, and that they felt driven to be creative in their instruction. It was evident that teachers wanted to "go the extra mile" to get the job done. A teacher described teaching in her high-performing school this way:

> It's hard, it's time consuming, but it's fun. I never do the same thing twice, and I've been teaching for 24 years. . . . I'm constantly modifying, changing, and adapting [so that] the course I teach this year is not the same as the course I taught last year.

**Teachers treated as professionals.** Although teachers in the six schools that participated in the study indicated their awareness of high expectations for them in their role as teachers, in most cases these high expectations seemed to work in tandem with their treatment as valued professionals. Relationships between teachers and administrators tended to be characterized by respect and trust. Teachers commonly reported that administrators did not try to micromanage instruction and that they generally felt a relatively high degree of freedom and autonomy, which enabled them to be more successful as teachers. One principal remarked, "I empower teachers and trust the staff with a lot of autonomy."

Teachers at high-performing schools indicated that they responded positively to such trust and empowerment. The three quotes that follow, taken from interviews at three different schools—one elementary school, one middle school, and one high school—illustrate the point:

> I have to say that I like the fact that our principal treats us like professionals. . . . What I appreciate is that he lets me know what my job is and then he lets me do my job . . . I feel that by him doing that, it makes me have a better attitude about being here and wanting to do the job I'm supposed to do.

> The administration trusts us—to give us free rein, to respect us—that does help too. It's not like they're standing over us with a microscope judging and asking questions about everything. It's sort of like, "Well, you know what you're doing. You're a degreed professional. We let you do what you can do."
>
> I think when the teachers are supported in the decisions they make and the teachers are not micromanaged—that they're free to follow the curriculum and follow the state guidelines in ways they feel appropriate—then I think that there are a lot of creative teachers out there who are finding interesting ways to teach their students, and the administration supports that. It contributes to the success of the school.

Interviewees from all six schools indicated that teachers felt valued and validated when they were trusted and empowered as professionals. This was reflected in such ways as supporting travel to professional meetings, minimizing non-instructional duties such as bus duty or cafeteria monitoring, and seeking teacher input on various school decisions and policies. However, the degree of freedom and autonomy afforded teachers was not identical at each of the six schools. Teachers at some schools reported that teacher observations, lesson plan submission, and other forms of monitoring were common, whereas teachers in other schools reported this was quite rare.

**Teacher collaboration.** The interviews indicated that teacher collaboration was another common feature of the six high-performing schools studied. Teachers and administrators indicated that teachers in their schools had a high level of professional rapport, worked well together, and frequently had instructionally focused discussions with their colleagues. Administrators generally tried to support collaboration by providing opportunities for teachers to work together. They did this by scheduling regular departmental meetings, assigning all teachers of a particular grade level the same planning period, and using other scheduling mechanisms. In addition, many teachers indicated that their collaboration included discussions that took place in informal settings. Teamwork and collaboration were common themes for staff at all six schools. Some fairly typical statements from three different schools include the following:

> We all work together—the second-grade teachers—we all meet together, and we talk about what's going well. If we have a bright idea, we'll share it with each other. . . . We have a critical friends group that meets where teachers get together and talk about problems they're having or concerns, and we talk about solutions to the problem, and that's been a wonderful help.
>
> We have a workroom, and I feel that [it] is very essential that we talk from fifth-grade to sixth-grade to seventh-grade to eighth-grade. We talk about what skills that they [students] are having

> difficulty at . . . Maybe "What worked with them in fifth?" when we are struggling at sixth to find what works.
>
> Specifically with geometry—there are three teachers that teach geometry A/B. We have met I think at least once a week just to say how's your class going, where are you, what were your trouble spots, and I'm having trouble with this area, and what did you do to fix or get this.

Particularly at the high school level, working within disciplines (i.e., mathematics, English, science, etc.) seemed to be the most common form of collaboration and was perceived by teachers as the most valuable. Some interviewees indicated that they did not believe there were sufficient opportunities for collaboration among teachers. These individuals typically cited lack of time or being too busy as reasons for this lack of collaboration.

**Emotionally warm, supportive learning environment.** The teachers and administrators interviewed at the six high-performing schools generally regarded their schools as warm, supportive learning environments. Words like "cheerful," "friendly," "nurturing," and "family" were frequently used to describe the school climate. Those interviewed indicated that administrators, teachers, students, and parents all contributed to a positive school atmosphere. Some teachers noted how students benefited from a warm, supportive learning environment: "The whole atmosphere of the school is a very positive atmosphere. The children here feel safe . . . because of the way they're treated by faculty, staff, and administration. So when they come into school, they feel like they're cared for, they feel like they're being nurtured, they feel like it's a pleasant place to be." Other teachers reflected on the beneficial effect a positive environment can have for staff:

> We are a very close-knit faculty family. We take care of each other, inside and outside the classroom. I think that has a tremendous effect on how well our faculty works together . . . You're more productive if you're happy and if you feel that you are working towards a common goal.

This supportive environment was generally perceived by school staff as a contributing factor to high levels of student achievement.

## School/Family/Community Connections

**Strong parent interest.** When teachers and administrators at the high-performing schools were asked if parents were engaged in their children's learning process, the typical answer was "yes." Teachers in all six of the high-performing schools spoke of the high levels of interest in the education process that were exhibited by the parents of their students. In fact, some teachers referred to parent interest as "overwhelming" at times. For instance, an elementary teacher commented: "They'll

knock your door down wanting to help out, and there's almost a point where you have to say 'No'; I have three volunteers today." Although high levels of active parent involvement were generally perceived as a positive factor, some teachers reported that in some cases the presence of parents may become so excessive as to become a deterrent in the classroom. Another elementary teacher commented: "Every now and again…I've seen one group that had an extreme amount of parent involvement which sometimes is overdone."

The interviewees reported that not only do the parents of their students serve as volunteers at the schools, they also become dedicated PTA/PTO members. They assist in raising funds for school projects to provide computers, playground equipment, and additional support money for teachers. An elementary teacher remarked: "The [PTA/PTO] last year gave every teacher $900, which is a lot compared to what most teachers get." An elementary teacher at a different school reflected on their PTA/PTO: "They do a lot with money and expertise. They come in as experts in different fields talking to our kids." Some of the teachers and administrators interviewed related that several of their students' parents stay in contact with them through the use of e-mail and scheduled meetings. An elementary teacher said: "Even your low-socioeconomic parents feel comfortable coming to this building and having meetings in this building."

In addition to having strong interest in the education process, the evidence collected at the six high-performing schools indicates that the parents of the students generally have high expectations for their children. Many of the teachers and administrators interviewed reported that a large number of the parents maintain regular contact with the child's teacher concerning grades and extracurricular projects. A high school teacher commented: "I think we're in a professional area here; we have lots of pilots, teachers' kids, doctors' kids; a lot of people who stress education. That's always a positive no matter where you go." An elementary parent added: "Parents…they do things with their children; they read with them, take them places…they have lots of experiences, lot of languages at home." Such parent efforts allow students to come to school prepared. The teachers and administrators of the schools indicated that most of the students were prepared to learn because most of them come from nurturing families that are able to provide for basic needs and support teaching and learning.

**Strong community support.** Not only is there evidence of strong parent interest in the participating high-performing schools, these schools also generally benefited from high levels of community support. All six high-performing schools that were visited reported high levels of community involvement, including nearby colleges and/or universities, local newspapers, and churches.

Once the six participating schools were identified, it was discovered that all six schools were located near colleges and/or universities. At all six schools, teachers and administrators reported taking advantage of the resources of those institutions of higher education—resources that are not necessarily available for many schools in Tennessee. For instance, an elementary teacher offered: "The community here gives so much to our school because we have the university and they are enriched culturally, academically, and

behaviorally." It is also important to note, however, that schools located in smaller communities appeared to rely more heavily on college and/or university support than schools located in larger communities; the larger the city in which the school was located the more dispersed the college and/or university involvement with the school seemed to be.

Not only do schools seem to benefit from colleges and/or universities within the community, they also appear to reap benefits from other institutions in their communities. These include parks, museums, and athletic opportunities. A high school teacher spoke of the community by saying:

> There's so many things offered to our students in this community. I mean there's a community playhouse here, there's a rowing club here…things that challenge them in the arts, that give them unique athletic opportunities…There's a lot of programs in our town where parents can get their kids plugged into productive activity that stimulates them.

In addition, the teachers and administrators in the six high-performing schools reported they received support from churches, local newspapers, and local businesses. For example, the principal at a high school commented: "We have a strong presence of church. A lot of youth ministers will come in and have lunch with our students." A teacher at that same high school added:

> Businesses will financially give support. They have a banner displayed at football games. Also the local newspapers are great about promoting…telling a story about what the students are up to and that makes the students feel fantastic. Even little things like putting their work in the display case.

An elementary teacher summarized her thoughts on education in the area by saying:

> I attribute it first of all to the community, its population, because the children come from education families. They are families who travel, families who read together, do homework together and study for tests together. The parents care. The parents want their children to achieve so the community's the biggest thing that I would attribute it to.

In short, strong levels of support from their local communities tended to be a characteristic of these high-performing schools.

## Effective Teaching

Teachers and administrators interviewed at the participating high-performing schools identified several factors related to effective teaching as components of their schools' success.

**Effective, dedicated teachers.** Interviewees at all six schools reported believing that effective and dedicated teachers played a vital role in their schools' success. One teacher remarked, "You have a very tremendous amount of very dedicated teachers whose goal it is to get the very best from each student . . . I think we've got that at this school." Those interviewed at five of the six schools cited the educational attainment of some or all of the faculty as a further indication of teacher quality. Said one teacher, "I think that our faculty are high-level achievers themselves, and I know that many attend workshops in their field to find out the newest studies, the newest technologies that are being developed, and we incorporate those into our classrooms quite often." A teacher from another school made a similar observation, "Superior teachers, highly qualified teachers, teachers that care about subject areas, and they're interested in ways of presenting the material."

Other teachers and administrators emphasized the years of teaching experience represented on their schools' faculties. They commonly indicated that the insight gained from that experience informs teachers' instruction to make them more effective and can help guide newer teachers with less experience. One elementary school teacher shared, "I'm the youngest on our grade level, but I always make sure that I'm going back to the others saying, 'What did you just do?' and 'What are you on?' making sure that I'm at least right there with them."

Interview participants at five of the six high-performing schools reported that teacher turnover rates in their schools were generally low.

**Mentoring and meaningful professional development.** Staff at four of the six participating schools reported that their school had a formal mentoring system for new teachers. These systems typically paired a new teacher with a more experienced teacher or group of teachers within the school. The interviewees who discussed their schools' mentoring programs believed these programs were valuable. For these teachers, mentoring was identified as an effective means of acclimating new teachers to the school and supporting teachers new to the classroom. One teacher described her experience this way:

> I was set up with a mentor teacher on my grade level, and she was responsible for taking me through first grade standards and first grade curriculum. But then throughout the year as a grade level, teachers—not only my mentor teacher but also the other teachers—kind of helped me out; let me know what was going on and what was the next step.

A principal commented about teacher mentoring by saying, "If I've got a young teacher that may not know how to get all that material covered by the time of testing, I've already assigned a mentor with them and they're taking them through it."

In schools with and without formal mentoring systems, interviewees indicated that experienced teachers often helped new teachers acclimate to the school in informal settings and discussions. One teacher remarked, "We've had several new teachers come in through the years, and the mentorship that is offered to these young people is just a natural part of what we do." This less formal mentoring might also apply to experienced teachers who were new to the particular school. One such teacher shared, "When I came to this school, I had already been teaching for four years. I had a lot of people who mentored me. And I wasn't a new teacher, but tradition is very strong here. And I guess they wanted to help me understand why they do what they do—the effects, the benefits."

Ongoing professional development and learning for teachers was another topic discussed by interview participants. In the six schools visited, responsibility for professional development was shared by the school and by its governing school district. Some teachers and administrators interviewed described professional development for teachers in very positive terms. Said one respondent, "We've had some wonderful experiences. We've had wonderful speakers come into our school. We've been sent out to various places that have been just great." Other interview participants believed the quality of their professional development was lacking and could be improved.

In general, the teachers interviewed seemed to be more positive about their professional development when they were allowed some flexibility in choosing the learning they received or had some input on the topics addressed. Other interviewees positively described teacher input on professional development:

> Basically what has happened is we have input from teachers at every level of this building. When they find something that strikes a chord, that appears to be meaningful, we usually will offer that as a suggestion to [principal], and usually he will research it and see if he can find out if we can afford a person to come.
>
> A lot of times schools will say "All teachers are going to go to this workshop on how to do such-and-such." We don't have those. . . . We are allowed to pick . . . I went to a workshop on computer simulation . . . I could use that as my professional development. An English teacher may not see that as useful . . . she can then find something that relates to her particular subject or interest.

However, one teacher described her less than positive experience this way: "They're [professional development needs] not determined well. We discuss it as a faculty, but we're just tied in to whatever the district says we should be [doing]. It's frustrating." Principals at all six schools reported using either formal or informal means to solicit teacher input about professional development.

**Adapting instruction to meet student needs.** The teachers and administrators interviewed at all six schools reported that their students comprise a considerable range of academic achievement levels. When working with low-achieving, middle-achieving, and high-achieving students, teachers indicated a willingness to individualize their instruction or to adapt their curriculum or materials to meet the needs of a particular student or group of students. Said a high school teacher describing the importance of adapting instruction to meet student needs:

> I've had some standard classes that could become an honors . . . class, and then I've had other standard classes that are very weak. So the way that you approach them—you have to handle each one a little differently. You have to modify your teaching strategies on a daily basis, because you can't treat them the same way. Some are very quiet and need no calming down to get orderly and to proceed with the day's lesson; others come in and on their own they're quiet. It goes back to the personality of the class. But you have to modify your teaching strategies; you can't just start with a fixed point in front of you and say, "I'm going to end up here." It never works that way.

The interview evidence indicated that this adaptation could take a number of forms, including but not limited to (1) individual attention from a teacher or teacher's aide; (2) offering multiple opportunities to learn a concept or skill; (3) working collaboratively with special education teachers; (4) classes that reinforce or remediate important skills (especially at the high school level); (5) adjusting the content using hands-on projects; (6) offering additional assignments; (7) re-teaching particular content; and (8) using centers or other programs that allow students to pace their own work, especially at the elementary school level. For example, an elementary school teacher reported that she tried to provide as much one-on-one interaction as possible: "You do lots of one-on-one, as much as you can. That's when you pull in your aide . . . Any time there's a free moment in your classroom, let the children engage in something else; you pull that child over so you can have one-on-one." A high school teacher discussed the school's efforts to help all students master reading and writing skills: "We have several courses for them to take so that they have lots of reinforcement—classes that help them, specifically, with reading or with writing. They'll not always just be grouped in a low-level class; they might be specifically concentrating on writing or concentrating on reading, and I think that helps."

**Employing a variety of instructional strategies.** Interview participants were asked to describe the instructional strategies and techniques used to present content to students in their schools. Although lecturing was a fairly common response (particularly in the high schools), the most common theme voiced by those responding to questions regarding instructional strategies was the use of a variety of approaches. The teachers and administrators interviewed indicated that decisions about instructional strategies were driven by content and by teacher preference. Using teaching strategies that interest or

engage students was also a key concern. Many teachers reported that they tried to use different instructional strategies to accommodate a variety of student learning styles. Said one middle school administrator, "The majority of our teachers are aware that we have visual, we have auditory, we have tactile learners, and they try to provide something for those students, for each one of them." An elementary school teacher shared, "We present it in a variety of ways. We use different instructional strategies because we have diverse learners, and . . . we try to reach all those learners."

The types of strategies reportedly employed tended to vary by school level. Elementary school teachers mentioned field trips, centers, fiction writing, a nature trail, guest speakers, incorporating music and art into the classroom, kinesthetic learning, using computers, cooperative learning, worksheets, board work, playing games, and use of videos or other media. Techniques mentioned by middle school teachers included discovery/investigation, peer tutoring in the classroom, use of graphic organizers, board work, class discussion, cooperative learning, writing, using computers, interactive activities, research projects, and use of videos and other media, guest speakers. High school teachers discussed cooperative learning, use of manipulatives, interactive activities, class discussion, discovery/investigation, debates, independent study, journaling/writing, peer tutoring, performance, and research projects.

**Creating environments that promote curiosity.** Interview participants at the six high-performing schools reported consistently making an effort to interest or engage students by encouraging high-level thinking, making connections between content areas, making connections between students' studies and the outside world, encouraging questions, and generally creating environments that promote student interest and curiosity. One elementary school teacher reported, "As a faculty, we work to make the children be thinkers." Teachers used a variety of projects, integrative learning units, questions, writing assignments, and other strategies to engage students' interest. A high school teacher remarked, "The types of questions that are asked—we tend to ask higher-level questions rather than low-level type questions that merely require a one-word response or just one fact. They have to begin to think and make connections in order to give a response." A high school social studies teacher observed, "We do a lot of writing. We do a lot of current events—kind of critical thinking—bringing in newspaper articles, and I think that helps out a lot. I try to get them aware of their surroundings." An elementary school teacher described how she sought to engage students:

> We had a fifth-grade class that actually sponsored a vote, and third through fifth graders got to vote. I know the children that I work with got to vote also, but because my children—in terms of the language that would be needed to understand about voting for somebody that they didn't even know—I let them vote for their favorite cartoon. So they understood what voting was.

Teachers at the participating schools used a variety of methods to create learning environments that promoted curiosity and student engagement.

**Creating environments where students are responsible for their own learning.** Interviewees at all six schools described ways in which they sought to create environments where students were responsible for their own learning. This could be accomplished by allowing students to provide input on what and how they learn, providing opportunities for students to take leadership roles, or providing students opportunities to engage in independent projects or other self-directed learning. Although this theme was more pronounced at the middle and high school levels, several interviewees in elementary schools addressed it as well. One elementary school teacher said, "My own personal style is for children to do the work and find their way as they do the work and ask for help as they need it." Another elementary school teacher said:

> Children know what their [*Tennessee Comprehensive Assessment Program*] scores are—they get those—and we believe that children take those to heart, because we make a big deal out of the test scores here. So we would sit down with you and we would say, "This is what we see from last year and we know you're probably concerned about this score, but let's talk about what we're going to do to pull you up to where you need to be."

A middle school teacher described the emphasis his school places on student responsibility:

> Students are encouraged to be responsible. If they're absent, they're responsible for getting their make-up work and getting it turned in on time. We send progress reports home with—we send work the students may have and we give them opportunities to make that up, but responsibility has always been stressed here: responsibility by the students.

A high school teacher stressed the importance of responsibility by saying, "You have to make sure that they [students] understand that they need to be responsible for their work." Teachers from one high school described presenting students with the challenge of being teachers for a day. Another high school teacher had this to say:

> I also think it's resulted in students being high achievers based upon the type of process skills that they are taught in school. They are taught to be independent thinkers; they are taught to analyze, to question; they're taught to become invested in their learning and basically take control of their learning rather than expecting everyone to do things for them.

Other teachers and administrators described how students demonstrate taking responsibility for their own learning by independently seeking teacher assistance, by being prepared for class, and by enthusiastic participating in class.

## Shared Leadership

When teachers and administrators in the six high-performing schools were asked if the school's leadership was a contributing factor to their schools' ability to attain and maintain high levels of student achievement, many interviewees indicated that it was. The administrators of these schools were generally reported by teachers to focus on teaching and learning as the central functions of the school. The respondents also mentioned (but less frequently) that the principal was likely to solicit input and share decisionmaking and to have implemented procedures and/or structures to facilitate teaching and learning.

**Places teaching and learning as the schools' central focus.** Many teachers in the high-performing schools reported that teaching and learning are the central focus of their school and that the school's administration plays a significant role in establishing and maintaining that focus. As one high school teacher put it, "I think the administration really works hard to make sure their teachers are prepared, that their teachers understand what they're looking for and what their goal is." Another teacher at the same high school stated, "I think the administration has consistently done a very good job of making education priority."

The fact that teaching and learning are priorities is communicated and reinforced in various ways in the high-performing schools. For example, the provision of supplies and materials is reported as a tangible indication of the importance administration places on teaching and learning even when funds for such support are tight. An elementary teacher noted, "[The principal] provides and supports you with the supplies and materials" even when funds are difficult to obtain. Teachers also reported that administrators in their high-performing schools created schedules that allowed teachers to regularly collaborate on teaching and learning, through grade-alike or course-alike meetings. "He makes sure that we all have common planning time between grade levels and when we have staff development or in-service he will allow us to have cross-grade-level meetings so that we know what the grade in front of us is doing and what the grade behind us is doing so that we can appropriately plan," commented an elementary teacher. This central focus on teaching and learning is also evident in the professionalism that teachers are expected/allowed to demonstrate. Witness the comment made by a high school teacher that reflects statements made by other teachers at other high-performing schools visited:

> Well, compared to the school I was at before, I think that the fact that the administration has such a devotion to making sure that teachers can teach, that their primary functions are to teach, that takes a lot of extra stress off the extra duties; we don't have bus duties. . . . And here, I feel they really do a good job of letting us just teach.

Other interview participants made similar comments about how administrators help make teaching and learning the school's central focus.

**Solicits input and shares decision-making.** The principals and other administrators of the high-performing schools visited all seemed to work to involve teachers in decision-making in the school. Teachers at the six high-performing schools commonly reported their ideas/opinions were actively sought, as is reflected in a comment made by an elementary teacher: "We have ideas. I feel like we are heard." Another teacher in the same elementary school indicated, "A lot of decisions are made at the district level, but as teachers we collaborate to decide how policies and decisions will be implemented." This notion was reinforced by a middle school teacher's comment that " . . . our school leadership listens closely to faculty members." A high school teacher was more effusive when she reported that "I'm very aware that our decision-making process and our goal setting and our developmental process is much, much more democratic [than other schools']; it comes down to our level and pushes up instead of starting from all up to down. So, I firmly feel that I landed in utopia."

Teachers in the high-performing schools visited were actively involved in the development and implementation of their schools' improvement plans. As an elementary teacher reported, "When we did [the School Improvement Plan] every teacher was on one committee." "We all had a lot of input into [the School Improvement Plan]." A middle school teacher said, "The staff was divided up into areas to develop the plan and then all the plans were presented to the faculty and the faculty said yea or nay, you like this or you don't like this." This teacher also noted active participation in the School Improvement Plan creation process.

Administrators of these high-performing schools commented about how they sought active involvement of teachers in the operation of the schools. One principal stated that his school had active steering committees and grade-level or unit leaders that involve teachers in making and implementing decisions relative to the educational programs of the school. Another principal indicated that his school had a school leadership team composed of administrators and teacher representatives from various segments of the school and that the team considers a wide variety of issues regarding the educational and operational aspects of the school. Another principal said that he was "trying to develop leadership capacity within the teaching staff so when we hire teachers, we communicate to them right off that our goal is that [they] find some area within the school where [they] feel [their] leadership can advance that part of the school. We try to encourage every teacher that we expect [them] to lead in some capacity, somewhere within the school."

**Implements processes/procedures to support teaching/learning.** As mentioned above, the interviewees reported that administrators of the high-performing schools created structures and processes that facilitated/supported/emphasized teaching and learning. Schedules were arranged to facilitate grade-alike or course-alike collaboration in some instances. An elementary school teacher reported, "We do have grade-level meetings on a pretty regular basis. We meet at grade levels to discuss different things. We have our own meetings; [the principal] is not in there with us." At another elementary school, a teacher said "We have monthly faculty meetings where we can talk and discuss issues that need to be taken on here at the school. We also have groups that

meet after school." Sometimes schedules were developed that allowed for whole faculty meetings or to allow special professional development activities for the faculty. "A couple of years ago, we did a formal program, best strategies of teaching, which involved everyone at all grade levels, doing some small group activities. It was healthy and an opportunity to get people together," stated a teacher from a high school. Critical friends groups, team teaching, mentoring, and other strategies have been employed in these high-performing schools to involve teachers and school administrators in activities that enhance and support the teaching/learning environment of the school.

## Shared Goals for Learning

In 2004, Tennessee schools were asked to submit school improvement plans to the state department of education. Identified low-performing schools were required to submit school improvement plans while all other schools were given the option of submitting a school improvement plan or an executive summary. All six of the high-performing schools created school improvement plans, whether or not they were submitted to the state department of education. Given that fact, it is interesting to note that a majority of the teachers and administrators interviewed in this study agreed that their schools have a clear mission and clear goals, though most, when asked, could not articulate them specifically. The primary goal, written or not, appeared to be high academic achievement. Most respondents stated that they adhered to their schools' goals whether they are written or not.

**School mission and goals are general and student driven.** It is apparent that most teachers and administrators feel strongly that it is their mission to set goals that help students achieve to the best of their ability and to prepare them for the future. For example, an elementary school teacher said, "Each student will leave here academically, socially, emotionally, and physically prepared for the next level, wherever that may be." A teacher at a middle school commented about preparing students for the future: "Academically high achievement is the basic goal of this school and we make sure that the students are ready for high school and for real-world problems and whatever comes up." Another teacher stated: "Our overall goal is to try to produce students that are lifelong learners." A teacher from an elementary school said, "Our goals are to be a good nurturing school to these children, to help achieve to the best of their ability . . . our mission is that every child can learn, and our goal is to have them learn to the best of our ability." Another teacher at the same elementary school agreed, saying, "Our goal is to nurture each child in a very caring manner so that he or she can learn to his or her maximum potential."

One high school teacher made the following statement, which was representative of most of the comments made regarding school missions and goals: "We want to create successful adults and whatever that means for the individual kid is different. Some of the kids are going on to Ivy League schools, some are going to two-year colleges, some are going to go right to the workforce, and so we need to make sure that those kids are given the tools they need to function successfully when they leave us." Although the goals

articulated in interviews tended to be general in nature (as opposed to focusing on specific academic or other criteria), they were, in almost all cases, focused on students and student outcomes.

**Goals are related to state standards.** For the most part, the teachers and administrators interviewed agreed that their schools' goals are related to state standards. Some teachers said they worked collaboratively to ensure that state standards are reflected in their goals. As one teacher explained, "When our school first came together at retreat, we matched with state curriculum, have checkups to see how much further we need…we have get-togethers on any given workshop, most are geared toward matching goals." Others implied that successful Gateway and Tennessee Comprehensive Assessment Program achievement test scores indicate a relation between their goals and state standards. A teacher from an elementary school said, "The state was telling us that every goal we set up had to be related to [Tennessee Comprehensive Assessment Program]. I do understand accountability, I do understand that you need data, hard data to show progress." Another teacher said, "When you look at it, that was our goal to try to be the best school and have good scores, and I think it's wonderful that we've been able to pull a lot of that together." A teacher at one of the high schools said, "I think that every year they kind of evaluate where we are and what we're doing to try to meet that goal, especially with the Gateway standards." A principal suggested that their school strives to exceed state standards: "We want to meet and exceed the state mandated standards for the Gateway test as well as the end-of-course test. We feel that by meeting and exceeding those standards that we are providing our students with the quality education they're entitled to, and of course, everybody looks to receive."

**Goals drive action.** In many cases, it was reported that school improvement plans were being used regularly to guide goal attainment. Teachers and administrators in all six participating schools reported that their schools have clear goals that are enumerated in their school improvement plans. It appears that to some extent these high-performing schools were implementing plans to help maintain high levels of student achievement. Referring to her school's improvement plan, one middle school teacher stated, "This almost has a life of its own and you work within it and that keeps it moving, we have to think we're more at a level of all carrying little oil cans and squirt a little oil here and there." Another teacher said, "We are always using [the school improvement plan] to improve, like looking at what needs improvement in our subjects and trying to improve on that in our different subjects." A middle school reported, "All of us are aware of the things that are on that plan and try to incorporate it daily." Some interview participants suggested that the school improvement plan, while a valuable tool, did not drive all school actions. One teacher described the school improvement plan by saying, "It's probably just a base, a foundation that everything is pretty much established on. But as far as using it, like I say, it's a guideline." When asked about her school's improvement plan, one elementary teacher responded, "The plan is to be the best school we can be and have high test scores; that is the light that guides us."

**Goals and action plans are shared.** Most of the teachers and administrators who were interviewed in the six participating high-performing schools stated that they have

personal copies of their schools' improvement plans. This was interpreted by researchers to mean that the school improvement plan is being shared with teachers. One teacher commented, "They [the teachers] have their copies and we do discuss it." Other teachers concurred, saying, "All teachers were given a copy at the start of the year" and "I've got a copy in my room. I don't have it on me but each teacher has a copy of that." One teacher said, "I have three copies."

In some cases, the teachers reported that they worked with colleagues and administration to develop the school improvement plan, as one middle school teacher responded, "not only do they have copies of it, they sit in on the preparation of those things on committees and it is a consensus thing." Another teacher agreed, saying, "Oh yes, we've all worked on those with the committee." An elementary teacher stated, "The principal keeps us informed of how we are doing and there are certain committees that work on different parts of it." One teacher's comment seemed typical: "Everyone works together for a common goal, which is the students and their education… everyone has like a shared purpose." The high-performing schools in this study developed a sense of shared goals by involving teachers in the process of developing the school improvement plan.

**Purposeful Student Assessment**

In an effort to maximize their students' potential to succeed academically, teachers at high-performing schools used various methods to evaluate student performance and used the resulting assessment data to assist in planning and delivering instruction.

**Multiple measures of student performance**. Teachers and administrators at each of the six high-performing schools indicated that multiple measures of student achievement and organizational performance were used. Most teachers reported that they used formal assessments, such as Gateway and Tennessee Comprehensive Assessment Program scores, to measure student performance. Some teachers also indicated that they assess students continuously throughout the school year, as explained by one teacher from an elementary school, "We do a lot of assessing one-on-one with the children…we also do unit tests, ongoing assessments, direct observation and then we'll take those results and see what the child needs to be challenged or maybe what child we need to really work with before we progress." Teachers from both middle schools made the following comments, "We pull the permanent records at the beginning and we do look at their report card, you look at their absences, that affects students' performance on their test" and "You're trying to assess constantly, you assess by activities, you assess by quizzes, and tests." A high school teacher said, "Assessment can be conversation, assessment can be just observing the kids to see what they do, looking at their homework and seeing how they're processing information, so we constantly use those."

**Use of data for planning instruction.** Most of the teachers and administrators who were interviewed were resoundingly clear about their use of data for planning

instruction. At these high-performing schools, data—especially achievement test scores—were used to emphasize the need for changes in the curriculum, to help enhance academically weak content areas, and to foster increased student achievement. A teacher from one of the elementary schools said, "Well, our general test scores in spelling were lower than they were in other areas, so let's brainstorm some ideas about that." Another teacher replied during an interview, "I know one year they determined before the break they had a weakness in grammar, so they started using daily oral language with every child. The next thing you know, that was part of their curriculum." An elementary school teacher explained, "We take test data and then we work up a plan based on how they scored, so if they scored low in a certain area then we would plan our curriculum to improve that area." Another teacher at the same elementary school agreed, saying, "We look at our [Tennessee Comprehensive Assessment Program] scores and see how we can improve what we are doing to have better scores next year and help students reach their highest potential and help us modify our instruction according to what we're weaker in." One teacher's remarks seemed to echo the sentiments of other teachers when she or he said, "Curriculums, in most places, are data-driven from evaluations."

**Frequent assessments for mastery.** The evidence gained from the interviews conducted in the study schools indicates that most of the teachers seemed to be aware of their students' ability to understand the material presented to them. This was accomplished because teachers assessed often for proficiency and were successful in identifying students who have difficulties mastering content. Furthermore, teachers reported a variety of strategies were employed to help ensure that students master subjects. A teacher from one of the elementary schools said, "I tend to do a couple of different assessments within the classroom as we go, obviously, and I do modify tests because I don't teach word for word what we're trying to learn. I've been known to take the original test and cut them up and take things out and add things in and do different things like that." Another teacher said, "There is lots of ongoing assessment; there's an assessment at the beginning, then progress reports and report cards come along at regular intervals…we do a lot of one-on-one assessment; there's no way to know if they know how to count to 110, for example, other than just sitting there and listening to each child." A teacher from a different elementary school added, "We don't move on from one academic skill to another until an 80 percent accuracy [is achieved]."

Based on the teacher interviews in all six participating schools, it also appears teachers frequently used informal observations to monitor student progress: "As an experienced teacher, you monitor to make sure that all students are engaged. If they're not, you have to find out why. For example, maybe they haven't mastered a prior skill." A middle school teacher said, "I monitor them and evaluate them often." As another teacher put it, "The teachers don't stand in front of the classroom and lecture to the kids, they move about the classroom and make contact with the students, checking regularly for success, whether it's just talking with the students, looking over their shoulder at what they're working on, or giving little forms of assessment throughout the presentation of the material." Frequent assessment for student mastery of content was a theme at all six high-performing schools.

**Achievement data are shared.** A small number of teachers and administrators interviewed offered evidence that revealed how achievement data are shared at their schools. For those who addressed the issue, it was clear that achievement data are typically disseminated to teachers by administrators during staff meetings and are often discussed among teachers informally. An elementary school teacher reported, "We review data together a couple of times a year during in-service." A middle school teacher made the following remark, "I guess more assessments have been available to us so that both administrators and teachers take time to go over it." A teacher at one of the elementary schools spoke about how achievement data are shared informally, indicating that data are shared "from conversations overlapping at lunchtime." A guidance counselor reported, "Our records are open and teachers are welcome to come and check a student's files to see their DAT scores, their [Tennessee Comprehensive Assessment Program] scores, any of that." Another interviewee stressed the importance placed on looking at achievement data: "I think the way it's set up in education, you'd be crazy to not look at it because we are basically held accountable, our whole school is held accountable based on our test scores…we all have to pay attention to the test scores and there's no other way around that just based on the federal mandate."

## Curriculum Aligned with State Content Standards

In each of the six high-performing schools visited, teachers and administrators were asked if the school's curriculum had been aligned with state standards and, if so, how that process had been accomplished. Teachers and administrators almost universally stated that their schools' curriculums had been aligned with state and district standards. While teachers could not always describe exactly how that alignment had been accomplished or was assessed, they could describe how administrators and other teachers ensured that the aligned curriculums were being implemented. Teachers also noted that many times they believed that the enacted curriculum was broader than that required by the state.

**Curriculum alignment.** In response to being asked if the school's curriculum had been aligned with the state's content standards, all administrators and almost all teachers said that such an alignment had been accomplished. In each instance, it was reported that the central office administration had initiated and guided the review and alignment process to conclusion. For example, an elementary teacher stated:

> We have state standards and then our county has gone through the state standards and has tried to, with our curriculum, align them and tell us they want us to teach these certain set of standards in this 6 weeks and the next set of standards in this 6 weeks.

In some instances teachers indicated that they were very involved in the curriculum alignment process. Other teachers seemed to have been less involved in the alignment process, as related by one middle school teacher: "I'm sure that it was done through the central office and through the supervisors there."

**Curriculum implementation.** The implementation of the aligned curriculum and the monitoring of that implementation is accomplished in different ways, sometimes even within the same school. One fairly common strategy mentioned by teachers was grade-alike or course-alike collaboration. For example, an elementary teacher stated, "We plan together [in grade-alike groups]; therefore, we can help each other and make sure we stay on task." At the middle/high school level, teachers indicated they often meet in course-alike groups. A high school teacher reported, "We meet as course groups. Like if you're teaching Algebra I, you'll meet with other Algebra I teachers and kind of keep in touch with where you are and what you're teaching and how in depth are you covering this example, that type of thing." In other instances, individual teachers work to assure that the curriculum they are teaching is meeting the standards. "I would say that [the implementation of the curriculum] depends on the individual teacher. I do. I keep my standards with me with every lesson plan I make," reported a middle school teacher. This approach was mirrored by a teacher at the other middle school, who said, "I've got my curriculum right here and I know that I've got this that has to be done by this date and, so, we make it happen."

In some cases, departments within the same school handle monitoring curriculum implementation differently. One middle school teacher reported that in her department, "We don't really have any monitoring system" whereas a teacher in a different department in the same school indicated that: "Our department meets and makes sure that everyone is not exactly on the same page but pretty close to make sure we are pacing ourselves correctly. No one gets very far behind." At the high school level, monitoring may also depend on whether the course content is being tested by the state, as pointed out by one high school teacher:

> Well, with the subjects that have the state test, I know that they're kept to a pretty stringent guide of what they need to cover. It's kind of been mapped out for them. I'm not sure if it's a district-wide thing but I know that some of these in-services and professional development things we went to there were workshops offered for like U.S. History where they have a state test, to make sure that they're up to data and up to speed with where they are. So, I'm not sure who mapped that out for them, but they have it and I know in Geography we don't have one.

One result of the alignment processes employed in these high-performing schools' districts has been the use of the curriculum guides provided by the state. "The state curriculum is provided. Every teacher in this building has a copy of that. And we use it," stated a middle school teacher while being interviewed. Districts also produced various kinds of materials to assist teachers in implementing the curriculum, such as curriculum maps, pacing guides, curriculum guides, or a course of study. For instance, a high school teacher stated, "We have a curriculum guide that teachers follow." These materials help teachers determine what to teach and how much time it will generally take to teach it. An

elementary teacher stated during an interview, "We have a curriculum map that helps you stay on top of what you're doing."

**Breadth of curriculum.** Teachers often reported that the curriculum enacted in their schools was broader than the state required; they had higher expectations for their students and sought to pursue those expectations through the implementation of a more rigorous curriculum (defined in terms of breadth) than was established by the state. For example, an elementary school teacher stated, "Here we're concerned, because we don't believe in teaching to mediocrity. We believe in challenging all children at all levels. We do work with the district's curriculum, but we don't do the bare minimum." Another teacher at the same school indicated: "You're expected to provide a curriculum for students that goes above and beyond just strictly out of a book; you need to be creative." These thoughts are reflected by a high school teacher, who said, "The curriculum itself that the teachers are developing is a challenging curriculum. Despite all the formalized testing we have today, I think the teachers go beyond teaching to the test. We're encouraging independent thinking." A teacher at the other high school stated, "I require my students, even though it's a health class, to write a couple of papers a year." The theme of teaching "above and beyond" the required curriculum was encountered at all six high-performing schools.

## Barriers to Sustaining High-Performing Schools

Teachers and administrators at the participating high-performing schools were asked if they had any concerns about their schools' ability to maintain high levels of student achievement. The most common response from interviewees, regardless of the school at which they worked, was that they had no concerns about sustaining high performance. Those who did express concerns were most likely to mention concerns falling into one major theme (i.e., changing demographics) or one of two minor themes (i.e., attracting high-quality teachers and continuing to progress and achieve).

**Change in student demographics.** The most frequently expressed concern related to sustaining high achievement, if a concern was expressed, was a change in student demographics in the service area of the school. Although at least one educator at each school expressed this concern, the educators at one of the middle schools and at the two high schools were more likely to mention it. The teachers in the middle school were concerned that demographic trends within the community may be reflected in a tendency for students to be slightly less prepared than they have been in the past. Said one teacher at that school, "Maybe there's starting to be some sort of a trend that children aren't always on grade level when they come to you." Another teacher at that middle school noted, "Some of the performance levels in some of the children have declined."

With the changes in the businesses and industry and school organization in the communities served by the high schools, educators at both high schools noted changes in the student demographics and observed that those changes present some challenges to their schools' abilities to maintain high standards of achievement. Said one high school

teacher, "Historically, there were a lot of students who were children of scientists. I think we are becoming a more typical . . . Tennessee school now."

Another teacher explained, "The kids are changing. You don't have the same culture that we did in the years past. We're having more and more kids with reading problems." Another teacher echoed this perception, "The special needs population seems to be growing. We're getting more students falling in the range of the average student and it seems like that top level is getting a little smaller. . . . There may not be as many professional jobs here as it was at one time."

Another high school teacher shared,

> I know that we're getting students at this school who do not belong at this school and we're seeing some gangs come in. I've been threatened by a gang member this year—that was fun—but I'm concerned that if the district doesn't do something to clean itself up then our student base is going to drop.

The high school teachers expressed concerns that if the demographic composition changes too much, more of their high-achieving students will probably move to the private schools in the area. Said one, "We have a lot of competition from private schools. Maybe five years ago some of those kids that are going to those schools may have come here but they're not anymore." Another consequence of the change, according to the teachers interviewed, is that the students coming into their school seem to have weaker preparation and lower motivation levels than in the past. Said one teacher, "This year we're finding that these kids just don't do anything. I mean, they don't do homework. They tell you on their personal data sheet that they don't do homework." Another said, "Certainly our school has changed this past year and I believe that we've had some students come in from other schools that may be a little bit weaker so that is definitely a concern." A teacher commented,

> It was just a slow, gradual change and last year it was almost a big leap as we changed as far as the demographics go. Not that that's a bad thing, it's just that you have a different clientele. I'm beginning to feel that there may not be as much parental involvement as I've seen in the past. More or less parents are dropping them off and expecting us to be parents for eight hours of the day, more so than what we've had in the past. They're not as concerned with the student's grade, and I think that may lead to a decline in the near future. That was one of the first things I noticed in previous schools - that when parents withdraw their commitment, then it starts to decline overall.

**Attracting high-quality teachers.** A concern expressed by a small number of educators in these high-performing schools is the maintenance of a highly skilled and committed cadre of teachers. These schools have had highly educated and experienced teachers and there are concerns about replacing these teachers when they retire. Said a

high school teacher, "My concerns would be on the caliber they would hire to replace all of us who are going to retire. In the past we have hired from across the United States. . . . Now, we tend to hire locally." One of the younger teachers at the same high school also felt the pressure of the retirements, saying, "I'm one of the younger teachers but soon I'll be one of the older teachers . . . and that puts a lot of responsibility on people in my shoes to pass on these expectations and this tradition to teachers coming in, to be involved in selecting teachers coming in." A teacher at one of the middle schools expressed similar concerns about the turnover in faculty, "We're going through a transition. Some of the older teachers are retiring. We're getting in a lot of younger teachers, which has a lot of positives, but the continuity and the consistency, the expertise isn't there. Younger people have more trial and error, maybe different ideas about how to do things, and you're never sure if they'll work or not." Another teacher at the same middle school said,

> We have what we call the geriatric faculty. In the next 5 to 10 years, all of us will be gone. Sometimes I wonder about the group following us, will they have the same work ethic. I'm not trying to be presumptuous or anything, but I'm not sure I see them spending as many hours, out-of-school hours, or as much getting involved in as much stuff as we have done.

**Continuing to progress and achieve.** Another concern of some of the educators in the high-performing schools related to the ability to sustain high achievement and continue to make progress. Their sense was that, if one is at the top, the only direction to go is down. It addition, in the view of some of those interviewed, the No Child Left Behind Act and Tennessee's Value-Added Assessment System seem to contribute to the sense that it will be difficult to continue to be viewed as the cream of the crop. The ramifications of No Child Left Behind were particularly salient for educators at one of the elementary schools, where a teacher commented, "A lot depends on No Child Left Behind funding or lack of funding and things that are demanded. Some things are not 100% possible. If you start near the top, where do you go?" Another said, "The only concern I have is just the nationwide No Child Left Behind Act. I personally don't see how in so many years we can all have 100% achievement." A teacher from one of the high schools commented on the challenge of value-added systems, such as the Tennessee Value-Added Assessment System:

> My biggest concern is that you know when you say the standard is a 90, let's just say, then you know you have a goal you have to shoot at and that's what you work at every year and you're able to see that. But when you say, "Well, the goal is 91 this year," or the goal is 92, when you keep changing the target, it makes it more difficult to be able to do that because if you're working hard each year to be successful, to provide an education for the kids, but what it's saying is you need to work harder next year because the standard's been [raised] and you go, "How can I work harder if I'm putting everything into it this year?"

A middle school teacher expressed a similar sentiment saying, "If you're at the top, it's hard to stay there. One of the, I guess, concerns that I have is, in Tennessee we use a value-added index and if your students are low to begin with, or average to begin with, you have a lot of room to improve and it looks better on your value added. Our scores are real high. Our math scores are really high and there is not a lot of room to improve."

Some educators were just generally worried about maintaining high levels of student achievement. Said a middle school teacher, "I do feel like it is stressed that we are held to a higher level than other schools in the county." A teacher at the other middle school noted, "We've been an 'A' school for so long, it's got to slip up somewhere. I don't think you can always be number one forever." An educator at one of the high schools commented,

> I think that probably looms in our minds and we probably talk about that, I think, just like a top-ranked basketball team or a top-ranked football team. Those teams don't get to that place by getting there and then sitting still. They get to that place by getting there and then constantly trying to figure out how do we get better and what are the things that might be coming down the road that will keep us from maintaining our standard and that's a constant conversation with us as we see demographics changing. . . . The challenge is if we are a good school then we will be able to be a good school regardless of the changes within the external environment, so that requires a lot of work and a lot of dialogue. You've got to be prepared as different groups come in."

A teacher from the other high school also talked about how to cope with being at the top, saying, "You don't ever let your guard down. You have to keep working."

## Survey Instruments

### Continuous School Improvement Questionnaire (CSIQ)

**Elementary schools.** Using the CSIQ norm group score values as the population values, the CSIQ subscale score averages for the high-performing schools were generally found to be higher than the population values. Examination of CSIQ subscales scores by level revealed that the high-performing elementary school professionals' scores were significantly higher, $p<.01$, on each subscale than those of the elementary school professionals in the Edvantia norm group. This would indicate that the characteristics of continuously improving schools as defined by the CSIQ are present to a high degree in the high-performing elementary schools studied. Review of Cohen's *d3'* indicator of effect size (Cohen, 1977) associated with the differences observed between the norm and sample elementary groups showed the effect should be deemed large in each instance except for the Shared Leadership, which would be judged to be medium to small. This analysis is summarized in Table 4.

Table 4. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between CSIQ Means for the Norm Group and High-Performing Elementary School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Learning Culture | 49.2 | 54.4 | 4.24 | 48 | 8.50 | p< .01 | 0.71 |
| School/Family/Community Connections | 47.3 | 56.3 | 4.68 | 49 | 13.46 | p< .01 | 1.03 |
| Shared Leadership | 47.6 | 51.7 | 7.33 | 48 | 3.88 | p< .01 | 0.41 |
| Shared Goals | 49.3 | 54.5 | 5.55 | 48 | 6.49 | p< .01 | 0.66 |
| Purposeful Student Assessment | 48.8 | 54.3 | 6.5 | 48 | 5.86 | p< .01 | 0.70 |
| Effective Teaching | 50.8 | 56 | 3.85 | 48 | 9.36 | p< .01 | 0.68 |

**Middle schools.** The pattern of differences for the CSIQ subscale score averages observed at the elementary level was also found at the middle school level. In each instance, the high-performing schools' professionals recorded higher significantly higher average scale scores than the CSIQ norm group, $p<.01$. This finding indicates that, in the high-performing middle schools studied, the continuously improving school characteristics as defined by the CSIQ are present to a high degree. Analysis of the differences between the norm and sample middle groups using Cohen's *d3'* indicator of effect size (Cohen, 1977) revealed that each difference should be deemed to reflect a medium to medium-large effect except for Shared Leadership and Effective Teaching where the effects would be judged to medium to small. These analyses are summarized in Table 5.

Table 5. *The t Test Values, A Levels, Cohen's d3' Values Associated with the Differences Between CSIQ Means for the Norm Group and High-Performing Middle School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Learning Culture | 46 | 50 | 5.62 | 96 | 6.97 | *p*< .01 | 0.53 |
| School/Family/Community Connections | 43.7 | 48.9 | 6.16 | 94 | 8.18 | *p*< .01 | 0.55 |
| Shared Leadership | 45.4 | 49 | 6.86 | 94 | 5.09 | *p*< .01 | 0.33 |
| Shared Goals | 44.7 | 49.5 | 6.98 | 91 | 6.56 | *p*< .01 | 0.53 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Purposeful Student Assessment | 44 | 50.2 | 6.22 | 88 | 9.35 | $p < .01$ | 0.71 |
| Effective Teaching | 47.6 | 50.1 | 5.99 | 94 | 4.05 | $p < .01$ | 0.32 |

**High school.** The analysis of the CSIQ subscale score averages is based on the perceptions of one high school's professionals. For each scale, the perceptions of the professionals in the high-performing school were not significantly different from those of the CSIQ norm group, $p<.01$. The analysis is summarized in Table 6 below.

Table 6. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between CSIQ Means for the Norm Group and High-Performing High School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Learning Culture | 46.8 | 47.4 | 6.9 | 85 | -0.80 | $p > .01$ | 0.08 |
| School/Family/Community Connections | 44.4 | 45 | 7.19 | 85 | -0.77 | $p > .01$ | 0.07 |
| Shared Leadership | 45.6 | 44.4 | 8.74 | 83 | 1.25 | $p > .01$ | -0.12 |
| Shared Goals | 45.4 | 44.8 | 7.76 | 84 | 0.71 | $p > .01$ | -0.07 |
| Purposeful Student Assessment | 44.7 | 44.1 | 8.04 | 82 | 0.68 | $p > .01$ | -0.07 |
| Effective Teaching | 47.8 | 48.1 | 6.94 | 86 | -0.40 | $p > .01$ | 0.04 |

**Measure of School Capacity for Improvement ( MSCI)**

**Elementary schools.** The average scores for the high-performing elementary school professionals on the MSCI scales were significantly different, $p < .01$, than the Edvantia norm group except for Improvement Program Coherence and Peer Reviewed Practice. Where there were significant differences, the associated effect sizes as reflected in Cohen's *d3'* (Cohen, 1977) were large. Refer to Table 7 for a summary of the analyses.

Table 7. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between MSCI Means for the Norm Group and High-Performing Elementary School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Equity of Practice | 5 | 5.53 | 0.39 | 49 | -9.51 | $p < .01$ | 0.78 |
| Expectations for Student Performance | 4.79 | 5.62 | 0.4 | 49 | -14.53 | $p < .01$ | 1.09 |
| Differentiated Instruction | 4.79 | 5.55 | 0.43 | 49 | -12.37 | $p < .01$ | 1.12 |
| Improvement Program Coherence | 4.57 | 4.65 | 0.68 | 49 | -0.82 | $p > .01$ | 0.12 |
| Peer Reviewed Practice | 3.49 | 3.9 | 1.13 | 49 | -2.54 | $p > .01$ | 0.60 |
| Coordinated Curriculum | 4.37 | 4.97 | 0.57 | 49 | -7.37 | $p < .01$ | 0.88 |
| Technical Resources | 4.49 | 5.34 | 0.63 | 49 | -9.44 | $p < .01$ | 1.25 |

**Middle schools.** For the high-performing middle schools, the average scores on MSCI scales for the education professionals showed the same pattern of differences found with the high-performing elementary schools. There were significant differences, $p < .01$, between the Edvantia norm group and the high-performing middle school group except for the Improvement Program Coherence and Peer Reviewed Practice scales. These differences and associated statistics are presented in Table 8. Where there were significant differences, the effect sizes, as reflected in Cohen's *d3'*(Cohen, 1977), were medium to large. The one exception was for the Equity of Practice scale, where the effect size would be judged to be small.

Table 8. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between MSCI Means for the Norm Group and High-Performing Middle School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Equity of Practice | 4.89 | 5.08 | 0.57 | 96 | -3.27 | $p < .01$ | 0.27 |
| Expectations for Student Performance | 4.55 | 5.31 | 0.42 | 96 | -17.73 | $p < .01$ | 0.92 |
| Differentiated Instruction | 4.55 | 5.03 | 0.52 | 96 | -9.04 | $p < .01$ | 0.60 |
| Improvement Program Coherence | 4.31 | 4.35 | 0.7 | 96 | -0.56 | $p > .01$ | 0.05 |
| Peer Reviewed Practice | 3.35 | 3.3 | 1.32 | 96 | 0.37 | $p > .01$ | -0.04 |

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3′* |
|---|---|---|---|---|---|---|---|
| Coordinated Curriculum | 4.16 | 4.61 | 0.92 | 96 | -4.79 | $p < .01$ | 0.42 |
| Technical Resources | 4.33 | 4.35 | .78 | 96 | -5.90 | $p > .01$ | 0.45 |

**High school.** For the participating high-performing high school the same pattern of differences found with the high-performing elementary and middle schools was observed. Again, the differences between the average scores on the MSCI scales for the Edvantia norm group and the high-performing high school group were significant, $p<.01$, except for the Improvement Program Coherence and Peer Reviewed Practice scales. Where there were significant differences, the effect sizes, as reflected in Cohen's *d3'*(Cohen, 1977), were judged to small to medium. The analysis is summarized in Table 9.

Table 9. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between MSCI Means for the Norm Group and High-Performing High School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3′* |
|---|---|---|---|---|---|---|---|
| Equity of Practice | 4.7 | 4.94 | 0.63 | 95 | -3.71 | $p < .01$ | 0.33 |
| Expectations for Student Performance | 4.39 | 4.85 | 0.72 | 95 | -6.23 | $p < .01$ | 0.56 |
| Differentiated Instruction | 4.33 | 4.76 | 0.7 | 95 | -5.99 | $p < .01$ | 0.55 |
| Improvement Program Coherence | 4.06 | 4.22 | 0.67 | 95 | -2.33 | $p > .01$ | 0.20 |
| Peer Reviewed Practice | 3.37 | 3.53 | 1.26 | 95 | -1.24 | $p > .01$ | 0.13 |
| Coordinated Curriculum | 3.85 | 4.17 | 0.95 | 95 | -3.28 | $p < .01$ | 0.32 |
| Technical Resources | 4.15 | 4.61 | 0.79 | 95 | -5.68 | $p < .01$ | 0.45 |

**Perceptions of School Culture (POSC)**

**Elementary schools.** On all scales of the POSC, there were significant differences, $p< .01$, between the high-performing elementary school professionals and the Edvantia norm group. The effect size, as reflected in Cohen's *d3'* (Cohen, 1977), associated with each of the differences was large. Refer to Table 10 for a summary of the analysis.

Table 10. *The t test values, α levels, Cohen's d3' values associated with the differences between POSC means for the norm group and high-performing elementary school professional educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Collaborative Working Relationships | 50 | 59.2 | 6.55 | 48 | -9.73 | $p<.01$ | 1.69 |
| Student-centered Vision, Mission and Policies | 53.6 | 60.3 | 6.59 | 48 | -7.04 | $p<.01$ | 1.65 |
| Student Responsibility for Learning | 43.6 | 54.7 | 5.8 | 48 | -13.26 | $p<.01$ | 2.77 |
| Teacher Responsibility for Learning | 52.1 | 59.9 | 6.74 | 48 | -8.02 | $p<.01$ | 2.18 |
| Inviting Physical Environment | 51.9 | 60.2 | 6.26 | 48 | -9.19 | $p<.01$ | 1.36 |
| Students and Parents as Decision Makers | 41.1 | 52.1 | 9 | 48 | -8.47 | $p<.01$ | 2.47 |

**Middle schools.** There were significant differences, $p< .01$, between the high-performing middle school professionals and the Edvantia norm group on all scales of the POSC. The effect size, as reflected in Cohen's *d3'* (Cohen, 1977), associated with each of the differences was large, except for the Students and Parents as Decision Makers scale where the effect size would be judged to be of medium size. Refer to Table 11 for a summary of the analysis.

Table 11. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between POSC Means for the Norm Group and High-Performing Middle School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Collaborative Working Relationships | 49.1 | 53.6 | 8.26 | 63 | -4.32 | $p< .01$ | 0.82 |
| Student-centered Vision, Mission and Policies | 51.8 | 55.1 | 7.24 | 63 | -3.62 | $p< .01$ | 0.74 |
| Student Responsibility for Learning | 39.7 | 47.32 | 6.75 | 63 | -8.96 | $p< .01$ | 1.36 |
| Teacher Responsibility for Learning | 49.7 | 53.76 | 7.4 | 63 | -4.35 | $p< .01$ | 0.92 |
| Inviting Physical Environment | 51.1 | 56.46 | 8.85 | 63 | -4.81 | $p< .01$ | 0.89 |
| Students and Parents as Decision Makers | 40.5 | 43.1 | 9.09 | 63 | -2.27 | $p> .01$ | 0.54 |

**High schools.** The high-performing high school professionals scored significantly higher on the average, $p<.01$, on all scales of the POSC than did the norm group. However, the effect size, as reflected in Cohen's *d3'*(Cohen, 1977), associated with each of the differences was varied. The effect size for the Inviting Physical Environment scale would be judged to be relatively small (i.e., Cohen's *d3'*= .34) while the effect size for the Student-centered Vision, Mission, and Policies scale would be judged to of medium size (i.e., Cohen's *d3'*= .61). The effect sizes for the remaining differences would all be judged to be large. The analyses are summarized in Table 12 below.

Table 12. *The t Test Values, α Levels, Cohen's d3' Values Associated with the Differences Between* POSC *Means for the Norm Group and High-Performing High School Professional Educators.*

| Scale | Norm Mean | Sample Mean | Sample *SD* | Sample Size | *t* test value | *p* value | Cohen's *d3'* |
|---|---|---|---|---|---|---|---|
| Collaborative Working Relationships | 44.9 | 50.1 | 8.71 | 149 | -7.29 | $p< .01$ | 1.05 |
| Student-centered Vision, Mission, and Policies | 48.1 | 50.8 | 8.66 | 149 | -3.81 | $p< .01$ | 0.61 |
| Student Responsibility for Learning | 38.1 | 44.9 | 7.65 | 149 | -10.85 | $p< .01$ | 1.48 |
| Teacher Responsibility for Learning | 46.8 | 51.2 | 7.86 | 149 | -6.83 | $p< .01$ | 1.32 |
| Inviting Physical Environment | 48 | 50.1 | 8.82 | 149 | -2.91 | $p< .01$ | 0.34 |
| Students and Parents as Decision Makers | 38.7 | 44.5 | 8.96 | 149 | -7.90 | $p< .01$ | 1.48 |

**Parent Survey**

When parents responded to the Parent Survey, they used a 1 to 4 scale to react to items that solicited information in five different categories: (1) communication between parents and teachers, (2) celebration of student successes, (3) requests for parent input, (4) communication between parents and the school, and (5) parent involvement in school events. The responses of elementary school parents were higher than the middle and high school parents on 15 of the 16 items. High school parents' responses were lower than elementary and middle school parents on all 16 items. Surveys distributed to parents in one of the participating schools were not returned to Edvantia researchers.

**Communication between parents and teachers.** Items 1 through 6 requested information from parents regarding their communication with the teacher (or teachers) of their student(s). The number of parents responding, means, and standard deviations per item for each school level are presented in Table 13. In general, the average rating

responses to these items were high (i.e., the averages approach 4). Parents of high school students generally had lower average ratings and larger standard deviations than parents of elementary and middle school students. Responses to Item 6 (i.e., being asked to be a trained volunteer in their child's classroom) clearly reflected a grade-level difference. For this item, the average for parents of elementary students was high ($M$ = 3.47), moderate for parents of middle school students ($M$ = 2.16), and low for parents of high school students ($M$ = 1.35). This would indicate that as students progress through school from elementary to high school, teachers generally requested less classroom assistance from parents.

Table 13. *The Number of Parents Responding, Means, and Standard Deviations for each School Level for Parent Survey Items 1, 2, 3, 4, 5, and 6.*

| Item | Level | *N* | *M* | *SD* |
|---|---|---|---|---|
| 1. My child's teacher periodically updates me on my child's progress. | Elementary | 38 | 3.89 | .39 |
| | Middle | 34 | 3.50 | .93 |
| | High | 23 | 2.35 | .89 |
| 2. When the school year began, I received tips from my child's teacher(s) regarding how I could help him/her (them) be more effective. | Elementary | 37 | 3.86 | .35 |
| | Middle | 33 | 3.55 | .91 |
| | High | 24 | 2.46 | 1.22 |
| 3. Parent conferences are scheduled at convenient times for me. | Elementary | 37 | 3.86 | .42 |
| | Middle | 31 | 3.61 | .84 |
| | High | 17 | 2.94 | .97 |
| 4. My child's teacher(s) promptly returns phone calls | Elementary | 30 | 3.87 | .35 |
| | Middle | 22 | 3.73 | .70 |
| | High | 18 | 3.00 | .77 |
| 5. My child's teacher(s) makes me feel I am welcome to visit my child's classroom. | Elementary | 36 | 3.92 | .28 |
| | Middle | 31 | 3.65 | .84 |
| | High | 17 | 3.06 | 1.03 |
| 6. My child's teacher(s) has encouraged me to become a trained volunteer in my child's classroom. | Elementary | 32 | 3.47 | 1.02 |
| | Middle | 31 | 2.16 | 1.37 |
| | High | 17 | 1.35 | 1.0 |

**Celebration of student successes.** Item 7 of the Parent Survey asked parents to indicate the extent to which student successes were celebrated at their child's school. Again, elementary parents indicated high levels of agreement that students were congratulated for high-quality work (i.e., $M$ = 3.97), and middle school parents responded with a somewhat lower average rating (i.e., $M$= 3.71). High school parents rated that item lower than both elementary and middle school parents (i.e., $M$ = 2.95). See Table 14. Whether the parents' perceptions are related to the frequency of actual events is not known.

Table 14. *The Number of Parents Responding, Means, and Standard Deviations for each School Level for Parent Survey Item 7.*

| Item | Level | *N* | *M* | *SD* |
|---|---|---|---|---|
| 7. Students at my child's school are congratulated for high-quality work. | Elementary | 36 | 3.97 | .17 |
| | Middle | 34 | 3.71 | .58 |
| | High | 19 | 2.95 | .97 |

**Requests for parent input.** Parents at each grade level were asked to respond to three items (i.e., Items 8, 9, and 10) that addressed the extent to which the school requested parent involvement in planning and/or evaluating education matters in the school and/or district. As was the case for almost all items, the responses of elementary school parents were higher on the average than other parents, with high school parents' responses being lower than other parents on the average. Refer to Table 15. In general, elementary parents in this sample rated requests for parent input higher than middle school parents, with high school parents' ratings for requests being lowest.

Table 15. *The Number of Parents Responding, Means, and Standard Deviations for each School Level for Parent Survey Items 8, 9, and 10.*

| Item | Level | *N* | *M* | *SD* |
|---|---|---|---|---|
| 8. Parents are surveyed annually regarding education matters related to my child's school and/or district. | Elementary | 32 | 3.41 | 1.07 |
| | Middle | 27 | 3.00 | 1.11 |
| | High | 16 | 2.13 | 1.20 |
| 9. My child's school regularly involves parents in planning and evaluating school goals and objectives. | Elementary | 31 | 3.45 | .93 |
| | Middle | 24 | 2.96 | 1.00 |
| | High | 19 | 2.47 | 1.17 |
| 10. The principal of my child's school regularly and systematically meets with parents. | Elementary | 25 | 3.68 | .63 |
| | Middle | 25 | 3.40 | .96 |
| | High | 20 | 2.80 | 1.11 |

**Communication between parents and the school.** Two items (i.e., Items 11 and 12) on the parent survey requested parents to rate relative communication between parents and the school. Parents of students at all three levels gave low ratings on the average (i.e., $M = 2.25$, 2.44, and 1.81 respectively) regarding whether they had heard school representatives speaking about the school at meetings in the community, though there was considerable variability among the ratings given (i.e., $SD = 1.11$, 1.34, 1.12 in order). On the other hand, the elementary school parents responded with high ratings on the average ($M = 3.66$) regarding the regular receipt of a school newsletter. Middle and high school parents responded less positively on the average ($M = 2.87$ and 2.61 respectively). See Table 16.

Table 16. *The Number of Parents Responding, Means, and Standard Deviations for each School Level for Parent Survey Items 11 and 12.*

| Item | Level | *N* | *M* | *SD* |
|---|---|---|---|---|
| 11. I have heard representatives of my child's school speak about my child's school to my civic organization, church, or at other community meetings I have attended. | Elementary | 24 | 2.25 | 1.11 |
| | Middle | 27 | 2.44 | 1.34 |
| | High | 21 | 1.81 | 1.12 |
| 12. My child's school regularly sends me a newsletter. | Elementary | 38 | 3.66 | .85 |
| | Middle | 30 | 2.87 | 1.36 |
| | High | 23 | 2.61 | 1.03 |

**Parent involvement in school events.** Parent participation in school events was assessed with Item 13 through 16 on the Parent Survey. These items asked parents to rate their involvement in Open House or PTA/O activities. Ratings of parent involvement were found to vary by level. Parents of elementary students rated their involvement as being somewhat higher on the average across the four items than middle school parents and much higher than high school parents. Table 17 summarizes the findings related to the items assessing parent involvement.

Table 17. *The Number of Parents Responding, Means, and Standard Deviations for each School Level for Parent Survey Items 13, 14, 15, and 16.*

| Item | Level | *N* | *M* | *SD* |
|---|---|---|---|---|
| 13. I attend Open Houses at my child's school. | Elementary | 37 | 3.81 | .62 |
| | Middle | 35 | 3.77 | .49 |
| | High | 21 | 3.38 | .74 |
| 14. Open House at my child's school is an informative and positive experience. | Elementary | 36 | 3.75 | .55 |
| | Middle | 35 | 3.74 | .70 |
| | High | 22 | 3.23 | .92 |
| 15. I attend three or more school-sponsored, parent-driven special events at my child's school each year. | Elementary | 35 | 3.74 | .61 |
| | Middle | 33 | 3.39 | .97 |
| | High | 23 | 3.04 | 1.02 |
| 16. I am actively involved in the parent/teacher organization at my child's school. | Elementary | 38 | 3.50 | .92 |
| | Middle | 34 | 2.71 | 1.14 |
| | High | 23 | 2.57 | .99 |

**Community Member Survey**

Community members other than students' parents completed the Community Member Survey, using a 1 to 4 scale to items that solicited their perceptions of the school. No respondents to the Community Member Survey distributed at high schools were received. The ratings of the community members responding about an elementary school were higher than for community members responding about a middle school on four of the items: (1) ensuring all students receive the best possible education, (2) encouraging parents and community members' involvement in school functions, (3)

communication with the community regarding key issues, and (4) whether they had heard the principal speak at a public gathering about education. Community members responding about to middle schools indicated higher average ratings regarding the receipt of a school newsletter and the extent to which the school has a formal mechanism for gathering community member input on substantive education issues. Table 18 summarizes the findings relative to the items assessing community members' perceptions of the schools.

Table 18. *The Number of Community Members Responding, Means, and Standard Deviations for the Elementary and Middle School Levels for the Community Member Survey Items 1, 2, 3, 4, 5, and 6.*

| Item | Level | *N* | *M* | *SD* |
|---|---|---|---|---|
| 1. _____ School works to ensure that all students receive the best education possible. | Elementary | 8 | 4.00 | .00 |
| | Middle | 12 | 3.75 | .62 |
| 2. Parents and community members are encouraged to participate in school functions (other than fundraisers). | Elementary | 8 | 3.63 | .74 |
| | Middle | 13 | 3.62 | .87 |
| 3. _____ School keeps in touch with the community on key issues. | Elementary | 8 | 3.75 | .46 |
| | Middle | 11 | 3.55 | .93 |
| 4. I have heard the principal of _____ School speak about education at my church, civic organization, or other community meetings I have attended. | Elementary | 7 | 3.71 | .76 |
| | Middle | 13 | 2.62 | 1.45 |
| 5. I regularly receive a newsletter from _____ School. | Elementary | 7 | 2.86 | 1.35 |
| | Middle | 13 | 3.00 | 1.29 |
| 6. _____ School has a formal mechanism (for instance, annual survey and/or community meetings) for gathering input from community members on substantive education issues. | Elementary | 7 | 3.29 | 1.25 |
| | Middle | 11 | 3.36 | 1.03 |

## Documents

Documents developed at high-performing schools were found to be consistent with those typical of most schools. For instance, almost all schools have mission statements and attendance policies. Most school administrators and teachers hope that students will become global citizens and they want students to attend regularly. And, while documentation provides the blueprint for school policies and procedures, it does not necessarily mean that the policies and procedures are executed in the same manner. The disparities, if they do exist, come in the execution of the policies and procedures specified in the documents in everyday practices. However, it was observed that several of the high-performing schools attempted to create community within their handbooks by including parents' home and cellular telephone numbers in school calendars (and in one instance similar information for parents). Such information would appear to foster communication between parents, teachers, and students outside school hours.

## CONCLUSIONS AND RECOMMENDATIONS

The researchers found that the sample of high-performing schools in Tennessee was characterized by dedicated, hard-working teachers implementing curricula described as being aligned with state standards and doing so within school cultures exhibiting high expectations for student/teacher performance. Furthermore, school leaders in these schools were described as making teaching and learning the schools' central focus. At these schools, teachers employed multiple assessment strategies and used the data so collected to make instructional decisions to implement differentiated teaching strategies in order to meet the learning needs of their students. For this particular set of high-performing schools in Tennessee, all of these things occurred in an environment of strong parent interest and community support. These findings are summarized in Table 19 organized around Edvantia's Seven Components of Continuously Improving Schools and are examined in greater detail in the paragraphs that follow.

Table 19. Summary of findings for the Tennessee High-Performing schools studied.

**Learning Culture**

- High expectations for students and teachers
- Hard-working, dedicated teachers who are treated as professionals
- Teacher collaboration
- Warm, supportive learning environment
- **School/Family/Community Connections**
- Strong parent interest and community support
- **Effective Teaching**
- New teachers are mentored
- Professional development is meaningful
- Teachers employ a variety of instructional strategies and adapt instruction to meet student needs
- Students are responsible for their own learning
- **Shared Leadership**
- School leaders make teaching and learning the school's central focus and put in place processes and procedures to support it
- School leaders solicit input and share decision-making
- **Shared Goals for Learning**
- School mission is student driven
- Learning goals are related to state standards and drive instruction
- **Purposeful Student Assessment**
- Use of data for planning instruction
- Frequent assessment for mastery using multiple measures
- **Curriculum Aligned with State Content Standards**
- Enacted curriculum is aligned with state standards
- Enacted curriculum is broader than required by state standards

## Learning Culture

As has been reported by other researchers (e.g., Kannapel & Clements, 2005; McGree, 2003; Picucci, Brownson, Kahlert, & Sobel, 2002) and confirmed by this study, one common characteristic of high-performing schools is the positive nature of their culture of teaching and learning excellence. This notion was supported by interview data as well as the results of the CSIQ, which indicated that most of the participating schools scored high on the Learning Culture subscale compared to their norm group schools. This culture of learning also was reflected in teacher and administrator interviews when they described their schools as having high expectations for student behavior and learning, a finding supported by the Student Expectations subscale scores on the MSCI, where all participating schools scored significantly higher than their respective norm groups. In addition, high expectations for teachers were indicated by interview data and the high scores on the Teacher Responsibility for Learning subscale of POSC**.** Teacher and administrator interviews also indicated teachers were typically dedicated and hard-working; were treated as professionals; generally provided a warm, supportive learning environment; and worked collaboratively to positively affect their students' learning—a finding supported by both interview data and high scores on the Collaborative Working Relationships subscale of POSC.

## School/Family/Community Connections

While many schools struggle to facilitate school/family/community interaction (see Jordon, Orozco, & Averett, 2001), generally speaking, the schools sampled can be characterized has having high levels of parent interest and community support. Not surprisingly, teachers and administrators at the high-performing schools indicated that parents were generally engaged in the education of their children and had high expectations regarding their learning, a finding reported by other researchers (Henderson & Mapp, 2002). In addition, these schools were also described by teachers and administrators as benefiting from high levels of community support, a description supported by higher scores on the School/Family/Community Connections subscale of the CSIQ than those of schools in their respective norm groups. The results of the Parent Survey indicated parent involvement occurs more often at the elementary level and comparatively less often at the high school level, a pattern commonly observed by others (Henderson & Mapp, 2002).

## Effective Teaching

As indicated by both interview and survey data, an emphasis on effective teaching and instructional practices was common in the high-performing schools and was supported by teacher mentoring processes and meaningful professional development. In

interviews, teachers frequently discussed employing a variety of instructional strategies and adapting their teaching strategies to meet student needs. These practices were also reflected in the results of the MSCI, where the studied schools scored significantly higher than the norm schools on the Differentiated Instruction subscale. In interviews, many teachers also described instructional practices that sought to create environments that promoted curiosity and in which students were responsible for their own learning. These procedures were also reflected in the high Student Responsibility for Learning subscale scores on the POSC. The high scores of the participating schools on the Effective Teaching subscale of the CSIQ also indicate that effective teaching was an emphasis. These findings are consistent with those reported by other researchers, including Trimble (2002) and Hair, Kraft, and Allen (2001).

## Shared Leadership

Reflecting what other researchers have found (e.g., Kannapel & Clements, 2005; Picucci, Brownson, Kahlert, & Sobel, 2002; University of Massachusetts Donohue Institute, 2004), many of the teachers and administrators interviewed indicated that the school's leadership was a contributing factor to school success. Administrators were reported to have made teaching and learning the school's central focus, solicited input and shared decision making, and implemented processes and procedures to support teaching and learning. The participating elementary and middle schools had scores on the Shared Leadership scale of the CSIQ that were higher than their respective norm groups. The high-performing high schools did not score at a higher level than their group. Other than the fact that both of the high schools in the sample were large, comprehensive high schools, the reason for the finding is not readily apparent.

## Shared Goals for Learning

Teachers and administrators reported that their schools had a clear educational mission to help students reach higher levels of learning and generally did so in a warm, nurturing environment. In that context, interviews revealed that most of the high-performing schools' teachers and administrators agreed that their schools had clear missions and clear goals (though not all interviewees could articulate what they were when asked). School mission and goals tended to be general and student driven. Teachers and administrators in the participating schools reported that their school goals were related to state standards, that their school goals drove action, and that their school goals were shared throughout the school, statements supported by high scores on the Shared Goals for Learning subscale on the CSIQ. The mean scores of the six participating schools on the Improvement Program Coherence subscale of the MSCI were not significantly different from those of the respective norm groups. Researchers studying other high performing schools have reported similar findings (e.g., Joint Legislative Audit and Review Commission of the Virginia General Assembly, 2004).

## Purposeful Student Assessment

At the high-performing schools that participated in this study, assessment of student learning was reported to be frequent. Furthermore, it was indicated that assessment data were commonly used for instructional decision making. CSIQ results also indicated that these high-performing schools tended to score high on the Purposeful Student Assessment subscale. Interview data indicated that, as Reeves (2000) discovered, teachers in high-performing schools quite often utilize multiple measures of student achievement and share achievement data.

## Curriculum Aligned with State Content Standards

Other researchers have reported that alignment of the curriculum with state content is a key feature of high-performing schools (Education Trust, 1999; Kannapel & Clements, 2005; United States Department of Education, 1999). Interviews and surveys at the high-performing schools in this study indicated that the curriculum was believed to be an important aspect of the instructional program of each school. Specifically, interview data revealed that the curriculums of the high-performing schools were aligned with state standards, that they were implemented, and that in many cases the enacted curriculum was broader than required. These findings are consistent with the results of the MSCI, where the participating schools scored higher than their respective norm groups on the Coordinated Curriculum subscale.

## Suggestions for Improving Student Achievement in Low-Performing Schools

Based on both the qualitative and quantitative data reported, there seem to be five things that hold potential for improving student achievement in low-performing schools. Further investigation may mitigate these conclusions and suggest other alternatives and/or interpretations. For now, teachers and administrators in low-performing schools can implement the following suggestions:

1. Emphasizing high expectations for student behavior and learning—if students are expected to behave and achieve, most will rise to the challenge.

2. Emphasizing high expectations for teachers—effective teaching is hard work that always seems to present new challenges.

3. Working hard—getting and sustaining high levels of student achievement takes dedicated effort; high student achievement is not a state achieved but a process maintained.

4. Focusing on effective teaching—focusing on mentoring, collaboration, and meaningful professional development as the means by which teachers learn to develop and implement instruction adapted to the meet the learning needs of students.

***5.*** Involving the parents—engage parents in the education of their children.

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## Appendix A:
## Interview Questions

**Interview Questions for**
**Tennessee High-Performing Schools Study**

The purpose of this interview is to allow us to gain better insight into how your school obtains and sustains high levels of student achievement. This interview is part of a case study that will allow us to understand better schools that have high levels of student achievement. You may not be able to answer each of these questions, especially if you have not been with the school long. Please answer each question to the best of your ability, and let me know if you would like to skip a question because you don't know how to respond to it.

General

1. To what do you attribute the success this school has had in producing high levels of student achievement?

Learning Culture

2. If new teachers asked you what it is like to work at this school, what would you tell them? (PROBE: student/community demographics, leadership, staff relationships, accountability demands, curriculum)

3. How are professional development needs of teachers determined and addressed at this school?

4. In what ways do you think the culture of this school might contribute to high levels of student achievement?

Shared Leadership

5. In what ways do you think the leadership at this school might contribute to high levels of student achievement? (PROBE: supportiveness, encouragement of PD, collaboration, instructional leader vs. managerial leader, respect and support toward leadership)

Shared Goals for Learning

6. Does your school have a school improvement plan?
    a. If yes, do you have a copy of the plan?
    b. If yes, to what extent does the school use the plan to guide day-to-day operations at the school?

7. What are the goals of this school?
    a. Are there specific or unique goals that set this school apart from others?

Aligned and Balanced Curriculum

8. Has the district curriculum been aligned to state's content standards? If yes, how was that accomplished?

9. Has the content of what teachers actually teach been aligned with the district's curriculum? If yes, how what that accomplished?

Effective Teaching

10. How is content generally presented at this school? (PROBE: lecture versus cooperative learning, use of worksheets, interdisciplinary and project-based instruction)

11. What happens in the classroom to ensure that all students are engaged and learning the material? (Classroom management versus instructional strategies)

Purposeful Student Assessment

12. Do teachers here review assessment data when they plan curriculum and instruction? In what ways? How do you know?

13. How do teachers here know they will get the necessary content covered before the state test?

School/Family/Community Connections

14. Do students at your school come prepared to learn?
    a. If so, what makes them prepared?
    b. If not, how do you help them with the barriers to learning they face?

15. Do you feel that in most cases, parents are partners with teachers in the learning process? If yes, what, specifically, do parents do to show they are engaged in their children's learning?

Continued Improvement

16. Do you have any concerns that your school will be able to maintain a high level of student achievement? If yes, what are they?

Closing

17. Is there anything I did not ask about that I should know in order to better understand what your school does to produce and maintain high levels of student achievement?

## Appendix B:

## Interview Question Sampling Matrix

| Person # | Type of Questions | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | General (1) | Learning Culture (3) | Shared Leadership (1) | School/ Family/ Community Connections (2) | Shared Goals (2) | Aligned & Balanced Curriculum (2) | Effective Teaching (2) | Purposeful Student Assessment (2) | Continued Improvement (1) | Closing (1) | # of Qs Asked |
| 1 | x | x | x | | | | | | x | x | 7 |
| 2 | x | | | x | x | | | | x | x | 7 |
| 3 | x | | | | | x | x | | x | x | 7 |
| 4 | x | x | | | | | | x | x | x | 8 |
| 5 | x | | x | x | | | | | x | x | 6 |
| 6 | x | | | | x | x | | | x | x | 7 |
| 7 | x | | | | | | x | x | x | x | 7 |
| 8 | x | x | x | | | | | | x | x | 7 |
| 9 | x | | | x | x | | | | x | x | 7 |
| 10 | x | | | | | x | x | | x | x | 7 |
| 11 | x | x | | | | | | x | x | x | 8 |
| 12 | x | | x | x | | | | | x | x | 6 |
| 13 | x | | | | x | x | | | x | x | 7 |
| 14 | x | | | | | | x | x | x | x | 7 |
| 15 | x | x | x | | | | | | x | x | 7 |
| 16 | x | | | x | x | | | | x | x | 7 |
| 17 | x | | | | | x | x | | x | x | 7 |
| 18 | x | x | | | | | | x | x | x | 8 |
| 19 | x | | x | x | | | | | x | x | 6 |
| 20 | x | | | | x | x | | | x | x | 7 |
| 21 | x | | | | | | x | x | x | x | 7 |
| Total Times Asked | 21 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 21 | 21 | |

**Appendix C:**

**Parent Survey**

# Parent Survey

## *[School Name]*

Please indicate you opinion regarding each of the items below by placing an X in the appropriate box at the end of each statement using the scale that includes **Never or No** (1), **Sometimes** (2), **Usually** (3), **Always or Yes** (4), and **Don't Know** (DK).

| | Never (or No) 1 | Sometimes 2 | Usually 3 | Always (or Yes) 4 | Don't Know DK |
|---|---|---|---|---|---|
| 1. My child's teacher periodically updates me on my child's progress. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 2. When the school year began, I received tips from my child's teacher(s) regarding how I could help her/him (them) be more effective. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 3. Parent conferences are scheduled at convenient times for me. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 4. My child's teacher(s) promptly returns phone calls. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 5. My child's teacher(s) makes me feel I am welcome to visit my child's classroom. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 6. My child's teacher(s) has encouraged me to become a trained volunteer in my child's classroom. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 7. Students at my child's school are congratulated for high-quality work. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 8. Parents are surveyed annually regarding education matters related to my child's school and/or district. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 9. My child's school regularly involves parents in planning and evaluating school goals and objectives. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 10. The principal of my child's school regularly and systematically meets with parents. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 11. I have heard representatives of my child's school speak about my child's school to my civic organization, church, or at other community meetings I have attended. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 12. My child's school regularly sends me a newsletter. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 13. I attend Open Houses at my child's school. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 14. Open House at my child's school is an informative and positive experience. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 15. I attend three or more school-sponsored, parent-driven special events at my child's school each year. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 16. I am actively involved in the parent/teacher organization at my child's school. | ❑ | ❑ | ❑ | ❑ | ❑ |

## Appendix D:

## Community Member Survey

# Community Member Survey

## *[School Name]*

Please indicate you opinion regarding each of the items below by placing an X in the appropriate box at the end of each statement using the scale where:

**Never (or No) = 1**
**Sometimes = 2**
**Usually = 3**
**Always (or Yes) = 4**
**Don't Know = DK**

| | Never (or No) 1 | Sometimes 2 | Usually 3 | Always (or Yes) 4 | Don't Know DK |
|---|---|---|---|---|---|
| 1. _____ School works to ensure that all students receive the best education possible. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 2. Parents and community members are encouraged to participate in school functions (other than fundraisers). | ❑ | ❑ | ❑ | ❑ | ❑ |
| 3. _____ School keeps in touch with the community on key issues. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 4. I have heard the principal of _____ School speak about education at my church, civic organization, or other community meetings I have attended. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 5. I regularly receive a newsletter from _____ School. | ❑ | ❑ | ❑ | ❑ | ❑ |
| 6. _____ School has a formal mechanism (for instance, annual survey and/or community meetings) for gathering input from community members on substantive education issues. | ❑ | ❑ | ❑ | ❑ | ❑ |

***Thank you for your time!***